

University of Dundee

DOCTOR OF PHILOSOPHY

**'Good Governance' of the Extractive Resources Sector
A Critical Analysis**

Dietsche, Evelyn

Award date:
2014

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

DOCTOR OF PHILOSOPHY

'Good Governance' of the Extractive Resources Sector

A Critical Analysis

Evelyn Dietsche

2014

University of Dundee

Conditions for Use and Duplication

Copyright of this work belongs to the author unless otherwise identified in the body of the thesis. It is permitted to use and duplicate this work only for personal and non-commercial research, study or criticism/review. You must obtain prior written consent from the author for any other use. Any quotation from this thesis must be acknowledged using the normal academic conventions. It is not permitted to supply the whole or part of this thesis to any other person or to post the same on any website or other online location without the prior written consent of the author. Contact the Discovery team (discovery@dundee.ac.uk) with any queries about the use or acknowledgement of this work.

**‘Good Governance’ of the Extractive Resources Sectors:
A Critical Analysis**

Evelyn Dietsche

PhD

University of Dundee

August 2014

Table of Contents

Figures and Tables.....	5
Summary	8
Abbreviations	9
1. Introduction	12
1.1 Topic at stake	12
1.1.1 What is ‘governance’?	13
1.1.2 Concerns	17
1.2 Rationale and relevance	21
1.2.1 Disconnections.....	23
1.3 Personal motivation.....	27
1.4 Objective and hypothesis	30
1.5 Questions and structure	31
1.5.1 High-level questions	32
1.5.2 Structure and chapter questions.....	32
1.6 Originality and audience, potential and limitations	34
1.7 Definitions.....	35
2. Literature review.....	36
2.1 Debate No 1 - Investing in the extractive resources sectors.....	37
2.1.1 Economic growth theories	37
2.1.2 Attracting foreign investment	40
2.1.3 Challenges	44
2.1.3.1 Macroeconomics.....	44
2.1.3.2 Project level social performance.....	48
2.1.4 Section summary	52
2.2 Debate No 2 - Political economy of extractive resources	54
2.2.1 Observing outcomes	55
2.2.1.1 Poor economic performance.....	55
2.2.1.2 Bad political regimes	56
2.2.1.3 Poor social outcomes	57
2.2.2 Explaining outcomes	61
2.2.2.1 Resource dependence	61
2.2.2.2 Rent seeking	64
2.2.2.3 Rentier states and societies	65
2.2.2.4 Explaining variance in outcomes.....	68
2.2.3 Institutions and positive outcomes	69
2.2.3.1 Rational choice institutionalism	72
2.2.3.2 Structural institutional analyses.....	76
2.2.4 Policy conclusions	79
2.3 Debate No 3 - Linking the resources sectors with other economic sectors.....	82
2.3.1 Linkage theory	83
2.3.1.1 Origins	84
2.3.1.2 Applications.....	85
2.3.1.3 Recent developments	88
2.3.2 Industrial policy.....	92
2.3.2.1 Market failure versus the risk of state failure	93
2.3.2.2 Comparative institutional advantages.....	93
2.3.2.3 Critical functions	94
2.3.3 Local content and employment.....	96
2.4 Comparison and open questions	97
3. What are institutions?.....	104

3.1 Levels of social analyses.....	104
3.1.1 Allocation of resources	106
3.1.2 Governance	107
3.1.3 Institutional environment	108
3.1.4 Social embeddedness	109
3.1.5 Connecting the levels.....	110
3.2 Methodologies.....	115
3.2.1 Cross-country statistical analyses	116
3.2.2 Single country case studies	118
3.2.3 Systematic comparative analyses.....	120
3.3 Observations	126
3.4 Summary: institutions matter, somehow	132
4. How do institutions change?	135
4.1 Institutional reforms in the extractive resources sectors	135
4.1.1 Reform reversals	136
4.1.2 Explaining reversals and backtracking	138
4.1.3 Challenges	139
4.2 Theories on institutional change.....	142
4.3 Property rights – input versus outcome.....	147
4.3.1 The liberal school of property rights.....	150
4.3.2 Critique of the liberal school.....	153
4.3.2.1 Nation-states and the provision of property rights.....	156
4.3.2.2 Property rights as a ‘public good’.....	159
4.3.2.3 Trade-offs.....	162
4.4 Summary: in need of better theory	164
5. How are institutions enforced?	169
5.1 State capacity.....	172
5.1.1 Bureaucratic efficiency	172
5.1.2 The ability to mobilise revenue.....	174
5.1.3 Social acceptance and legitimacy	175
5.2 Prospects	176
5.3 Summary: steering by using processes that enjoy legitimacy.....	178
6. Sector legal frameworks	181
6.1 Constitutional provisions.....	183
6.1.1 Primary ownership of extractive resources.....	184
6.1.2 Legal traditions	185
6.1.3 Origins and reform trajectories	186
6.2 Sector specific legislation.....	188
6.2.1 Generality versus specificity.....	190
6.2.2 Granting rights	190
6.2.3 Role assigned to national companies	193
6.3 Contracts and agreements.....	195
6.3.1 Oil and gas sectors	196
6.3.2 Mining sector	198
6.5 Summary: paying attention to legacies and path dependencies	200
7. The argument	204
7.1 The questions	207
7.2 The substance	208
7.2.1 Chapter 2 – The three main debates.....	208
7.2.2 Chapter 3 - Defining institutions.....	210
7.2.3 Chapter 4 – Changing institutions.....	212
7.2.4 Chapter 5 – Enforcing institutions	216
7.2.5 Chapter 6 - Variances in sector legal frameworks	217
7.3 The answers to the three high-level questions	219

7.3.1	Policy conclusions on resource governance	219
7.3.2	Resource sector governance and the complexity of institutional analyses.....	222
7.3.3	Strengths and weaknesses of the existing scholarship.....	225
7.4	Implications of the strengths and weaknesses of the existing scholarship	231
7.4.1	Building on the strengths.....	231
7.4.2	Tackling the weaknesses	234
8.	Implications for practice.....	240
9.	Conclusion.....	248
	Bibliography	253

Figures and Tables

Chapter 1

Figure 1: Matrix on the uses of the governance concept 16

Figure 2: Two perspectives 24

Chapter 2

Figure 3: Key debates on resource sector governance 36

Figure 4: Key questions raised by the four uses of the Governance Concept 72

Table 1: Proxies measuring institutional quality 74

Figure 5: The Staple Trap Model 87

Figure 6: UNECA's perspective on linkages 90

Figure 7: Key questions for the governance of the extractive resources sectors 99

Chapter 3

Figure 8: Levels of Social Analyses 105

Figure 9: Research methodologies 115

Figure 10: Quadrant 1 Taxonomy - levels of social analyses versus methodologies 126

Figure 11: Quadrant 1 Taxonomy – populated 127

Chapter 4

Figure 12: Institutional change – input versus outcome 144

Figure 13: Property rights and sector legal frameworks 149

Chapter 6

Table 2: Comparative differences in constitutional provisions 188

Table 3: Comparative differences in Sector Legislation 195

<i>Table 4: Sector and regional differences in the use of contracts and agreements</i>	200
--	-----

Chapter 8

<i>Figure 14: The IAD framework – conceptualising an action arena</i>	242
---	-----

<i>Figure 15: Connecting levels through the lens of the IAD framework</i>	243
---	-----

Declaration

I, Evelyn Dietsche, am the author of this thesis and, unless otherwise stated, all references cited have been consulted by me. The work that this thesis records has been carried out by me, and it has not been previously accepted for a higher degree.

Signature

Date

Summary

This doctoral thesis presents a critical analysis of the global debate on the ‘good governance’ of the extractive resources sectors. Its starting point is that over the past decade this debate has seen a remarkable elevation, while at the same time the governance concept itself has been subjected to critique. To understand how the sector-focused ‘good governance’ agenda compares against this critique, the thesis uses a conceptual framework that identifies the different uses of this concept. Against this background, it reviews the main scholarly debates on the opportunities and challenges of countries producing extractive resources and identifies four critical questions, which it then sets out to answer.

The main argument is that the global debate on the ‘good governance’ of the extractive resources sectors has been built on the widely endorsed conclusion that ‘good institutions’ make for better outcomes and that therefore producer countries need to improve their sector institutions. However, this seemingly obvious conclusion has ignored the complexity and confusion around ‘governance’ and ‘institutions’ that prevails across the broader social science literature. This argument is based on the answers the thesis provides to four critical questions: *what are institutions; how do institutions change; how are they enforced; and do existing institutions matter for the design of interventions aimed at improving institutions.*

The thesis lays open that the policy conclusions of the global debate are premised on the dominance of a particular reference point paired with a particular methodology where the emphasis has been on, first, identifying the types of institutions that have apparently led to desired results, and then to promote these as a means to steer towards these results. It concludes that this focus has premised the global agenda on a false sense of clarity on what producer countries ought to be improving.

Abbreviations

ACI	Actor-Centred Institutionalism
CSR	Corporate Social Responsibility
DPI	Database on Political Institutions
EI	Extractive Industries
EIA	Environmental Impact Assessment
EIR	Extractive Industry Review
EITI	Extractive Industry Transparency Initiative
ESIA	Environmental and Social Impact Assessment
FPIC	Free, Prior and Informed Consent
GRI	Global Reporting Initiative
IAD	Institutional Analysis and Development Framework
ICMM	International Council on Mining and Metals
ICRG	International Country Risk Guide
IFC	International Finance Corporation
IFI	International Financial Institution
IIED	International Institute for Environment and Development
ILUA	Indigenous Land Use Agreement
IMF	International Monetary Fund
KPCS	Kimberley Process Certification Scheme
MMSD	Mining, Minerals and Sustainable Development
NGO	Non-Governmental Organisation

NMC	National Mining Company
NOC	National Oil Company
NRC	National Resources Charter
NRGI	Natural Resources Governance Institute
NRF	Natural Resource Fund
NTA	Native Title Act
OECD	Organisation for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PFM	Public Financial Management
POLINARES	Research Project on EU Policy on Natural Resources
PPR	Protect, Respect and Remedy
PSA	Production Sharing Agreement
PSC	Production Sharing Contract
PWYP	Public What You Pay
REI	Resource Endowment Initiative
RMDI	Responsible Minerals Development Initiative
RWI	Revenue Watch Institute
SA	Service Agreement
SI	Social Investment
SIA	Social Impact Assessment
SLA	Sustainable Livelihoods Approach
UNCTAD	United National Conference on Trade and Development

UNECA	United Nations Economic Commission for Africa
UNIDO	United Nations Industrial Development Organization
UNRISD	United Nations Research Institute for Social Development
VPSHR	Voluntary Principles on Security and Human Rights
WBCSD	World Business Council for Sustainable Development
WEF	World Economic Forum

1. Introduction

1.1 Topic at stake

This doctoral thesis presents a critical analysis of the global debate on the ‘good governance’ of the extractive resources sectors. The question, how these sectors should be governed, has prompted several responses. Various international initiatives have been set up, alongside or after the World Bank’s Extractive Industry Review (EIR) that was completed in 2004. Their main agenda has been to improve transparency and to help civil society organisations put pressure on politicians and bureaucrats to become more accountable. Among the most widely known efforts are the *Publish-What-You-Pay* coalition (PWYP), the *Extractive Industry Transparency Initiative* (EITI), the *Revenue Watch Institute* (RWI) and the *Natural Resources Charter* (NRC).¹

The agenda has received endorsement at the inter-governmental level. In 2013 EU member states reached an agreement in the European Parliament to mandate EU-listed and EU-incorporated resource developers to report their payments to the governments of producer countries. As part of its G8 2013 presidency the UK government has been a frontrunner in supporting this effort.² In the US, section 1504 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 pursues a similar objective. In 2012, the Organisation for Economic Cooperation and Development (OECD) set up a dialogue process on natural resource-based development to debate and learn how the extractive resources sectors can play a transformative role in producer countries.³ Multilateral and bilateral development agencies have further supported this agenda, by directly funding

¹ Since June 2014, the RWI and the NRC have merged into one organisation, the Natural Resources Governance Institute (NRGI).

² <https://www.gov.uk/government/consultations/open-government-partnership-uk-national-action-plan-2013/open-government-partnership-uk-national-action-plan-2013-to-2015> (last visited on 04.11.2013)

³ <http://www.oecd.org/development/50452316.pdf> (last visited on 04.11.2013).

some of the Non-Governmental Organisation (NGO)-led international initiatives or initiating dedicated extractive industry support programmes.⁴

Particular segments of the extractive industries have also got together to explore in greater depth how their investments can support development in producer countries. For example, following the completion of the *Mining, Minerals and Sustainable Development* (MMSD) project in 2002, the International Council on Mining and Metals (ICMM) initiated its *Resource Endowment Initiative* (REI) and other targeted efforts. In 2010, the World Economic Forum (WEF) initiated its *Responsible Minerals Development Initiative* (RMDI).

Over the past decade there has been a remarkable elevation of the global debate on the ‘good governance’ of the extractive resources sectors. However, in the broader social science literature the use of the governance concept has been subjected to critique (Pierre 2000, Hyden et al 2004, Mkandawire 2012, Fukuyama 2013). This raises the fundamental question, how the sector-focused good governance agenda compares against this critique. Are there perhaps flaws in the sector-focused debate that have not yet been sufficiently recognised?

1.1.1 What is ‘governance’?

The thesis embarks from the position that the global debate on the ‘good governance’ of the extractive resources sectors forms a part of the attention that development practitioners have paid to ‘governance’ more generally. This much broader debate was initially prompted by observations that well-meaning technocratic reforms had often not led to the developmental outcomes that were expected (Ahrens 2000, Dietsche 2003). The term ‘governance’ provided the international development community with a

⁴ See Kari Lipschutz and Mark Henstridge (2013) for a recent stock-take and overview of governance initiatives targeted at the extractives resources sectors. These authors lament the absence of consistency on how ‘governance’ has been defined across more than 50 interventions.

reference point to start discussing all things political (Hyden et al 2004). In particular, it allowed development practitioners to reflect upon the political economy of government policies and decisions and the economic, political and social institutions that underpin them.

There is a positive side to the focus on governance in the development debate. It has led to the recognition that economic development is pre-conditioned by political and social institutions. There is a synergy with various strands of institutional analyses that have experienced a revival since the 1980s (Williamson 1985, 2000a, 2000b, North 1990, Immergut 1997, 2005, Koelble 1995, Hall and Taylor 1996, Thelen 1999). These analyses have often taken a long-term historical perspective and have focused on comparing the public policies and political economies across European and other OECD countries. They received a further boost when the economic transformation and the global repercussions of the post-Soviet Union era prompted critical observers to rethink the institutional underpinnings of modern market economies (Ahrens 1998, Khan and Jomo 2000).

Development practitioners have asked what insights institutional analyses hold for supporting development in non-OECD countries (Oppen 2008). Development organisations have sought to operationalise institutional analyses to inform and condition governance reforms. They have drawn on various types of indicators to inform and shape reform programmes. The World Bank's *Governance Indicators*, publishing data since 1996, are widely known. More recently, the RWI has added a *Resource Governance Index*, which seeks to specifically identify the 'governance deficits' of resource producing countries.⁵ Qualitative deliberations and assessments on governance include, for example, the Bertelsmann Foundation's country reports, DFID's *Drivers of*

⁵ <http://www.revenuewatch.org/rgi/report> (last visited 16.10.2013)

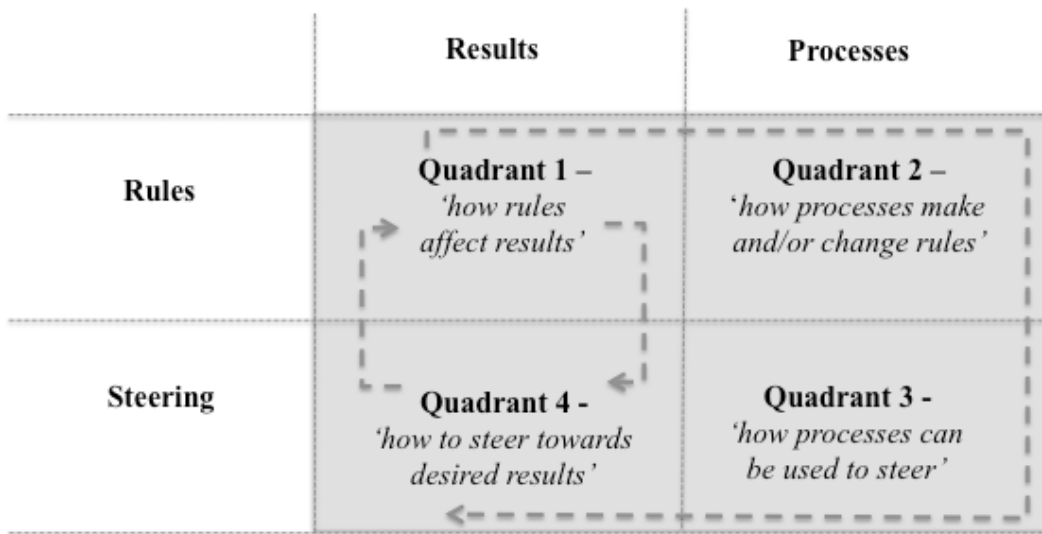
Change work and the World Bank's Problem-Driven Governance and Political Economic Analysis (Fritz et al 2009).

The challenge is that 'governance' has been defined in several ways and continues to mean different things to different constituencies. Just before the sector-focused governance debate started to gathered momentum, Hyden at al (2004) observed that, across the social sciences, the governance concept had been put to four different uses. These have depended on whether scholars focused on **results**, **processes**, **rules** or **the ability to steer**.

Broadly speaking, **results** are the economic, political or economic outcomes that countries have achieved, for example, their economic growth rates or their performance on social development indicators. **Rules** are the institutions that shape economic, political and social transactions. These could include, for example, a country's political regime, its legal system, or it public sector organisations. **Processes** are the multi-level and multi-stakeholder interactions that produce rules and collective decisions. For example, these include domestic public policy decision-making or the development of international regimes. The **ability to steer** entails the administrative capacity of public entities to enforce public policy decisions. These could be national entities, for example a sector ministry, but also international organisations or local government authorities.

Translating the original graph from Hyden at al (2004) into a matrix, Figure 1 visualises the four possible pair combinations of these four dimensions.

Figure 1: Matrix on the uses of the governance concept



Source: author's figure, adapted from Hyden et al (2004), p. 13.

This matrix is central to the thesis. It provides the conceptual framework around which the various chapters are organised to identify the shortcomings of the sector-specific 'good governance' debate. For ease of referencing, the four pair combinations are labelled as quadrants. Thus, **Quadrant 1** reflects how rules affect results; **Quadrant 2** reflects how processes make and/or change rules; **Quadrant 3** reflects how processes can be used to steer; and **Quadrant 4** reflects how steering towards desired results might be attempted. The arrows shown in Figure 1 indicate the relationship between the two dimensions of each pair combination. Important here is to note the two dotted arrows pointing from Quadrant 1 to Quadrant 4. One arrow shows a *short cut route* from Quadrant 1 to Quadrant 4, suggesting that knowing how rules affect results can be immediately translated into actions that steer towards desired results. However, there is also a *longer route* from Quadrant 1 to Quadrant 4, via Quadrant 2 and Quadrant 3, which suggests that changing and improving rules is more difficult than predicated by the *short cut route*.

Hyden et al (2004) noted that each pair combination is affiliated with particular strands of social science research. For example, Quadrant 1 represents the work of scholars of comparative politics, who compare countries to find out if rules make a difference to results. Those represented by Quadrant 2 include international relations scholars, who are interested in multi-level and multi-stakeholder processes and how through these new rules emerge, or existing ones get changed. Quadrant 3 covers students of public administration, who also focus on interdependent, multi-level public policy processes, but want to learn how these processes can be steered. Finally, Quadrant 4 reflects the perspective of international development agencies. They conceive ‘governance’ as a tool that can be used to steer towards desired results. Not least, it is their obligation vis-à-vis taxpayers to account for impact that puts them firmly in this quadrant.

This thesis suggests that the social science research reflected in Quadrant 1 and Quadrant 2 has drawn on various strands of institutional analyses that have seen a revival since the 1980s. This is because ‘rules’ are part of the social science notion of ‘institutions’. However, the work of the two sets of scholars represented by these two Quadrants differ by whether rules, and therefore institutions, are seen as inputs for achieving particular results (Quadrant 1), or whether they are seen as the outcomes of processes (Quadrant 2).

1.1.2 Concerns

‘Governance’ remains a contested concept. This raises concerns about its widespread use in the community of policy advisors focusing on the extractive resources sectors. Outside of this community, observers have attributed the confused state of discussion on ‘governance’ to the complexity and poor conceptualisation of the term in relation to institutional analyses. For example, Andrews (2013) draws a strong conclusion based on his review of the mixed results produced by reforms targeted at improving governance in the area of public financial management. He argues that before international development

agencies take actions on reforms that seek to bring about institutional change, they should better conceptualise the contextual complexity of the issue at stake and adopt a process-oriented theory of change.

Another critical opinion is that of Fukuyama (2013). He criticises the dominant preoccupation of reform proposals that seek the imposition of institutions that limit or check power. He challenges the basic assumption that states and those who represent them are inherently predatory and need to be checked. This assumption, he believes, has resulted in insufficient attention being paid to critical questions, such as: *where does state power come from? How does it increase or decrease over time? How do the institutions actually emerge that allow states to accumulate and use power? And, under what conditions is state power used to support broad-based economic and social development?* At the core of Fukuyama's critique lies a distinction that proponents of the governance agenda have typically ignored: that the political processes by which policymakers set objectives and goals are not the same as the administrative capability of the state apparatus to make and enforce rules and to deliver public goods and services.

Mkandawire (2012) has put forth a third critique. In his review on how the study of institutions has influenced development thinking, he has noted that the perceived 'crisis of governance' from the late 1980s was initially interpreted against the background of a negative role of the state in the economy. Throughout the 1990s, this interpretation led to the support for 'good governance' reforms aimed at liberalising and scaling back the influence of public authorities. Quantitative analyses have lent credibility to the focus on institutions and the conclusion that institutional reforms are needed. But these analyses have suffered from multiple conceptual challenges and measurement problems. The result has been two unresolved challenges. The first of these is *institutional monocropping*, and refers to the presumption of an ideal-type set of (typically) Anglo-American institutions

that can be transplanted irrespective of country context. The second is *institutional monotasking*, which presumes that a particular institution fulfils just one function.

This thesis seeks to draw out the tension between the remarkable elevation of the sector-focused governance agenda and the evolving critical debate about governance and institutional analyses in the wider social science literature. It becomes strikingly obvious that there is such a tension, when the sector-focused agenda is juxtaposed with research that focuses on OECD countries. Contrary to the former, this research explicitly acknowledges the multiple uses to which the term governance has been put and the confusion to which this has led.

For example, more than a decade ago Pierre (2000) attested to this confusion in relation to the changing role of the state and how the term ‘governance’ has been applied to analyse this role at both the national and international level.⁶ He identified two broad meanings: some scholars see governance as the ‘steering’ that governments do to achieve specific outcomes; others see governance as a coordinated process of policy-making involving public-private interactions and policy networks that are institutionalised to a greater or lesser extent. Another example is Sabatier (2007), who took stock of the existing body of frameworks and theories applied to understand how policy processes work. He concluded that there is a great need for better theories to untangle and understand the complexity of policy processes. This conclusion suggests that there is merit on paying closer attention to the issues that arise in Quadrant 2 and Quadrant 3, rather than treating these as trivial. Figure 1 indicates this trivialisation by means of the *short cut route* of the arrow pointing from Quadrant 1 to Quadrant 4. It suggests that

⁶ Pierre’s (2000) critique of ‘governance’ precedes that of Hyden et al (2004). He identifies five uses of the governance concepts. Four uses correspond with those defined by Hyden et al, whereas the fifth use brings up the issue of ‘corporate governance’ focusing on the role of the private sector vis-à-vis that of the state. While this fifth dimension is not directly relevant for this thesis and its focus on the global debate on the good governance of the extractive resources sectors, it holds insights for the corporate provision of public goods and services in areas of limited statehood. See Krasner and Risse (2014).

insights gained on *'how rules affect results'* (Quadrant 1) can be used directly to propose *'how to steer towards desired results'* (Quadrant 2).

Some observers have started to notice the tension between these different sets of literatures and that these are challenging the sector-focused governance agenda. Benner and Soares de Oliveira (2010) have been struck by the dominant focus on the negative outcomes associated with international investments in the export-oriented energy sector. They are surprised by the rapid rise of a good/bad nexus in the global energy governance debate since the early 2000s and observe that whenever something goes wrong in producer countries proponents are quick to associate this with 'bad governance' leading to various types of 'resource curse'. They recognise that this nexus has prompted the widely endorsed suggestion that global interventions targeted at achieving 'good governance' will lead to better socio-economic outcomes. In particular, more transparency is seen as a panacea. These authors caution that this perspective faces some fundamental challenges, because the structures underpinning global energy and minerals markets are shaped by the existing relationships between producer and consumer countries. It raises the question, whether these structures are likely to change, merely as a result of international advocacy and development organisations calling for producer countries to improve transparency in the hope and the expectation that this will improve accountability. The counter argument is that more is needed to transform the structures of global energy and minerals markets, not least because the underpinning accountability relationships are complex.

Dannreuther and Ostrowski (2013) suggest that a transformation may be on its way, prompted by a new era of state capitalism where the governments of producer countries will become more assertive in how they manage their respective extractive resources sectors. These authors argue that this new era is replacing the era of liberal capitalism that

has shaped the relationship between producer countries and resource developers from the 1980s until recently. They surmise that the new era is prompted by the evolving social and political concerns and ideological stances adopted by producer countries interacting with global energy and minerals markets. This suggests that at least some producer countries will be revisiting the use of industrial policies and other state interventionist measures to address apparent market failures. If these authors are right, the remarkable prominence gained by the global agenda on the ‘good governance’ of the extractive resources sectors could become relegated to a side show, alongside politicians and bureaucrats of producer countries revising domestic policy stances in ways that could have profound implications for global energy and minerals markets but without necessarily delivering the broad-based accountability that the global good governance agenda hopes for.

1.2 Rationale and relevance

Many observers have noted that the exploitation of extractive resources has not always served the producer countries that host foreign funded extractive industry projects. This observation has nurtured a vibrant debate on the subject of the ‘resource curse’. It has led some to suggest that such investments may almost inevitably lead to poor economic, political and social outcomes in low- and middle-income countries.

There are several explanations of how poor outcomes have come about. These have prompted a search for, and the supply of, policy advice aimed at ensuring that such investments benefit host countries and their citizens. This debate has gained momentum since it evolved from an academic research agenda to one where several international initiatives, dedicated NGOs and multilateral and bilateral development organisations have supported actions to improve resource sector governance. The action agenda has landed

on the seemingly obvious conclusion that, in order to improve outcomes, producer countries need to improve their sector-specific institutions.

Another development has taken place at the level of individual producer countries. It points to country-internal dynamics that are unfolding in parallel, but not necessarily connected to, the global agenda. In some producer countries, governments have come under increased domestic pressure to spread the benefits that extractive resources sectors deliver to the country and its citizens. Policy-makers face demands from domestic constituencies to ensure that resource exploitation serves not only a small political and economic elite, but also citizens more broadly. This pressure is thought to have increased, at least in part, because of the steady rise in commodity prices since the early 2000s. Prices have been driven up mainly by rising demand resulting from the industrial transformation and urbanisation of China and other emerging market economies (Farooki and Kaplinsky 2012, Erten and Ocampo 2012, UNCTAD 2013). Since the 1990s, foreign investment has funded the development of large extractives projects that have since commenced production; this has exerted additional internal pressure on governments.⁷ These projects often have substantial local level impacts that require not only private but also public sector responses.

Global think tanks and research institutions come to recognise that changes are taking place within producer countries. Conferences and workshop discussion papers increasingly underline the role the extractive resources sector can (or should) play in contributing to broader economic opportunities in producer countries (Wise and Shtylla 2007, UNECA 2012, Brookings Africa Growth Initiative 2013, OECD 2013, McKinsey 2013b). A recent trend survey of global commodity markets recognises that cost increases for the production of metals include access to supply factors (McKinsey 2013a). Several

⁷ See Haglund (2011) for an overview of non-OECD countries that have recently become more dependent on their hydrocarbon and minerals sectors.

governments of importing countries have started to surmise that access to resources might become more constrained in the future, if the governments of producer countries cannot ensure that their export-oriented extractive resources sectors benefit citizens more broadly.⁸ Some governments have already gone as far as linking their development assistance to this objective.⁹ Multinational companies recognise that there are political risks associated with the failure to gain and retain a licence-to-operate from a broader set of constituencies.¹⁰ This could result in additional costs and erode shareholder value (DiBoscio et al 2013). They surmise that it might be possible to mitigate this risk, if they can successfully support host governments to improve economic and social outcomes at the local, regional and the national level.¹¹ However, a challenge has been that internal dynamics are unfolding in different ways in different countries (Stevens et al 2013). This makes it difficult to standardise responses from corporate headquarters, and to rely on generalised advice from third parties.

1.2.1 Disconnections

Figure 2 serves to illustrate that there are several disconnections between the developments that take place at the global, the national and the local level.

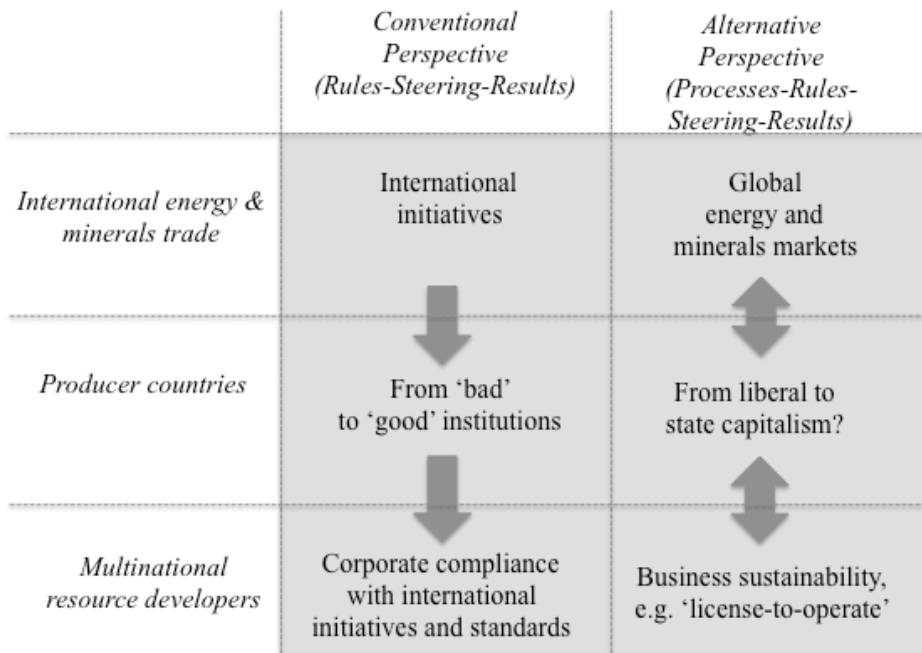
⁸ See DEFRA (2012) for an overview of European Raw Materials Strategies, including for example the European Commission (2013) and Germany (BMW 2010, BMZ 2010).

⁹ Author's observation based on unpublished donor documentation.

¹⁰ For recent literature on the licence-to-operate concept see Prno and Slocombe (2012), Owen and Kemp (2013), Prno (2013), Moffat and Zhang (2014).

¹¹ Based on author's personal experience working in and with the extractive industries.

Figure 2: Two perspectives



Source: author's figure.

In the left hand column, Figure 2 shows the basic logic of the global agenda seeking to positively impact the governance of the extractive resources sectors by putting pressure on the governments of producer countries to improve their institutions. This column is referred to as the *conventional perspective*. In the right hand column, the figure suggests a more dynamic multi-level playing field, linking internal changes in producer countries with global energy and minerals markets and the operating environment of multinational resource developers. This column sets out an *alternative perspective*. These two perspectives offer two different concepts of change, where one is linear and mono-causal aiming for particular outcomes. The other perspective is dynamic. It recognises interconnections and multi-level processes that may, or may not lead, to better development outcomes.

The key message of Figure 2 is that the *conventional perspective* is driven top-down with the objective to improve outcomes in producer countries by means of improving their

institutions. The *alternative perspective* suggests that the concept of change implied by the *conventional perspective* is disconnected from changes to global energy and minerals markets that are shaped by the dynamic interactions between producer and consumer countries and multinational resource developers. It is also disconnected from the dynamic transformations that might be taking place within producer countries as a possible result of heightened internal pressures. At the level of multinational resource developers, shown in the bottom row, global initiatives are disconnected from the corporate practices of, and responses by, multinational resource developers to pressures at the national and global level. At the same time, across different country contexts resource developers experience increasing pressures at the national and sub-national level and face the challenge of having to expand their local impact mitigation measures towards delivering on broader-based development objectives. Illustrative is, for example, the experience of multinational mining companies operating in Peru, where Rees et al (2012) have shown that good corporate compliance with social performance standards has not been sufficient to mitigate social conflicts around mine sites and, more widely, in and between mining regions. This suggests that achieving business sustainability requires not only getting corporate social performance right at the local level. Increasingly, this corporate function has to look upwards and link into multi-level processes that involve more complex layers of local, regional, national and global constituencies.¹²

The *conventional perspective* reflects the space of Quadrant 1 and Quadrant 4, where steering towards desired results is associated with the adoption of ‘good rules’ from top-down. In contrast, the *alternative perspective* reflects that space of Quadrant 2 and 3, where ‘good rules’ associated with good results are the outcome of processes that have been successfully steered towards improving existing rules. These processes do not work top-down, but span across different levels and presume positive collective action.

¹² Based on author’s personal experience working in and with the extractive industries.

Recognising the disconnections between the left hand and right hand column of Figure 2 is important, because those funding and supporting international initiatives and associated actions expect positive results. Where such funding involves international development agencies, taxpayers' money is spent on realising these expectations. Several international development organisations have also begun to develop and scale up programmes targeted at the governance of the extractive resources sectors. In their efforts to move countries from bad to good institutions, international development agencies have typically adopted two approaches. They have either provided targeted technical assistance to devise solutions to specific public sector management challenges related to the extractive resources sectors. Or, they have supported the international NGO-led initiatives to increase transparency in these sectors in the expectation that this will lead to improved accountability and will ultimately support the development of better institutions. According to Mkandawire (2012), both of these approaches are prone to support institutional mono-cropping and mono-tasking.

The broader social science literature suggests that the theory of institutional change implicit in the *conventional perspective* is too simplistic, because it presumes that it is possible to generalise recommendations for institutional reforms across different country contexts.¹³ In contrast, the *alternative perspective* suggests a theory of institutional change where outcomes are associated with the characteristics of interconnected and multi-level decision-making processes. These are placed in particular country contexts and attention is paid, not only to the *prima facie* adoption of institutional reforms but also the enforcement of rules. Enforcement means, for example, that formal rules set out in legislation can actually be implemented and are not undermined by, perhaps, conflicting informal rules.

¹³ Several evaluations and critical reviews have raised questions with respect to the theory of change underpinning reform programmes that have followed the *short cut route*. For example, see Kolstad et al (2009), Kolstad and Wiig (2009), IDS (2010), Mejía Acosta (2010), Thurber et al (2010), GIZ (2011), and Lipschutz and Henstridge (2013). A review of this literature is included in Dietsche et al. (2013).

The contrasting of these two perspectives is important for at least two sets of constituencies. First, multinational resource developers recognise that complying with, and responding positively to, an expanding set of international standards and initiatives is not sufficient to sustaining their businesses in terms of gaining and maintaining a social licence-to-operate.¹⁴ Second, it is not good enough to only view the policy makers of producer countries as the unaccountable agents that cause governance failures. It is after all these agents who have a critical role to play in advocating and driving through the institutional reforms that are envisaged by the good governance agenda. The *conventional perspective* on the good governance of the extractive resources sectors leaves observers of the international energy and minerals markets puzzled about the expectations associated with this top-down approach, while the multi-level playing field conceived in the *alternative perspective* seems more relevant to how global energy and mineral markets are shaped in practice.

1.3 Personal motivation

There is a clear dissonance between (i) the challenges faced by both the governments of producer countries and resource developers to broaden and increase the developmental contributions that the extractive resources sectors provide for producer countries and their citizens and (ii) the global advocacy around international initiatives that aspire to improve the governance of these sectors by focusing on constraining producer country governments and resource developers.

From the perspective of a corporate practitioner, multinational resources companies are dependent on the governments of producer countries to set the terms and manage the political and socio-economic risks and opportunities associated with the production of

¹⁴ For example, this message is conveyed in Davis and Franks (2011), Rees et al (2012) and ICMM (2013).

extractive resources. Governments carry the primary responsibility to evolve national policies and institutional frameworks to serve their citizens. This suggests that governments need more rather than less authority, and also that that authority would have to be exercised in a positive manner. Proponents of the extractive resources governance agenda have put the emphasis on constraining the hands of politicians and bureaucrats. Their basic assumption has been that these agents are potentially malicious and/or incompetent. At the same time, they have also sought to impose conditions upon multinational resource developers to resume responsibilities that arguably should be looked after by public authorities and be addressed through more broadly legitimate public policies and legal frameworks. This well-meant strategy of the global advocates of good sector governance poses a conundrum that leaves little scope for governments to develop and institutionalise the domestic multipartite coalitions that the pursuit of long-term development objectives requires.

Based on the historical comparative social science literature, positive economic and social transformations are underpinned by fortunate alliances and coalitions between private sector interests and public sector responsibilities, mediated by political and social institutions (North et al 1983: 1966, Polanyi 1977:1944, North 1990, Tilly 1992, Lachmann 2000, Bates 2001, Hall and Soskice 2001, Lange and Rueschemeyer 2005, Greif 2006, Chang 2007, North et al 2009). In contrast much of the global advocacy shaping producer countries and resource developers suggests a zero-sum game. Alternatively, this advocacy has assumed that the political elites of these countries are conniving with resource developers to serve their short-term objectives at the expense of meeting the developmental aspirations of citizens more broadly.¹⁵ Either of these two assumptions provides a poor basis for identifying common objectives and joined-up

¹⁵ The presence of these two assumptions manifests itself most obviously in the discussion on the taxation of the extractive resources sector (ICMM 2009). The author of this thesis was the lead author for this study.

actions that could increase the positive developmental legacies of producing extractive resources. However, it is such actions that are required to build greater linkages between the extractive and other economic sectors.

The personal motivation underpinning this thesis is to raise awareness about the potential overplay of the positive expectations associated with the global agenda on the good governance of the extractive resources sectors. The expectations and actions that this agenda prompts may be distracting the governments of producer countries from working through the domestic policy processes that are required to develop the fortunate state-society relations that build on common interests; and from resolving, or at least managing, distributive conflicts of interest. It is these processes, together with the capacity of public administrations to enforce the respective policy decisions that follow on from them, that need to settle on a balance between two factors. Namely, the provision of *rights and access to resources* for those that find and produce extractive resources, and the *duties and obligations* that they are expected to meet in return. This does not mean the *status quo* that currently exists in respective producer countries has found the right balance. However, there is a risk that the external advice provided as a result of the global resources sectors governance agenda is too generic and pays too little attention to critical country context specific circumstances. The broader comparative social science research on the role of institutions and institutional change highlights the country context specific circumstances. Where this research has revisited the success and failures of the institutional reforms introduced in other sectors as part of the ‘good governance’ agenda, it voices strong warnings about the lack of attention paid towards contextualisation and the more subtle functions that these reforms ought to have delivered (Aligica 2014; Andrews 2013; Evans 2007, Chang 2007).¹⁶ These warnings have not yet been recognised within the broader community of policy advisors working on resource sector

¹⁶ A notable exception to this is Cangiano et al (2013).

governance. They would appear to be of critical importance, not only for producer countries, but also for those recognising and managing the political and social risks faced by resource developers, and thus ultimately the global consumers of extractive resources. Against this background, this thesis seeks to highlight that there is a wider set of existing approaches and theoretical frameworks that could be applied to better inform the debate on how individual countries can better manage their extractive resources sectors.

1.4 Objective and hypothesis

The **objective** of this doctoral research is to set out a conceptual framework that provides new insights for further research and practice to the community of policy advisors and academic investigators sharing an interest in explaining and improving the developmental outcomes of countries producing extractive resources. It does not aspire to test an existing theory, or develop a new one.

Drawing on Ostrom (2007), a conceptual framework is understood to comprise of a set of variables and the relationships among them that are presumed to account for a set of phenomena. In contrast to a theory, a conceptual framework does not necessarily specify the directions of the relationships among variables (Sabatier 2007, p. 6). It is common for researchers to adopt a conceptual approach when they have felt frustrated by an existing body of theories and models that have not sufficiently explained observed empirical developments (Ostrom 2005, North et al 2006, Cangiano et al 2013).

The justification for pitching this thesis as contributing a conceptual framework is the **hypothesis** that much of the existing work on resource sector governance has been slanted towards a particular type of theoretical approach that has prompted a global agenda, and a corresponding action agenda, to develop in one particular direction. Following a review of this literature, the thesis presents a taxonomy within which the

evolution of the main debates in the existing literature can be traced and organised. This then provides the basis for a structured discussion on a set of four questions that the existing literature has not sufficiently addressed.

The thesis makes a forward-looking case for the scholarship on extractive resources sector governance to focus more on theory development. The ontological starting point of much of the existing literature has been the assumption that there are inherent problems associated with the exploitation of extractive resources, because politicians and policy makers are not sufficiently held to account. Many proponents have set out to test and confirm theories that have explained negative outcomes and then devised potential ‘cures’. The most common research methodology applied has conditioned the insights gained, and supported the generalisation of policy advice, at one particular level of social analysis. This bias has supported the development of a global agenda that has generally ignored the work of those who have focused on explaining variance in outcomes. Comparative work has straddled across different levels of social analyses and has pointed to several configurations of variables and relationships underpinning similar outcomes. Thus, the thesis proposes that there is an imbalance between the work that has tested theories to derive generic policy advice and that which has inductively, but nevertheless systematically and comparatively, developed theory to explicate the potential causal linkages between natural resource exploitation and economic, political and social outcomes.

1.5 Questions and structure

The thesis develops a conceptual framework that creates the analytical space within which the origins of the main debates on the governance of the resources sectors can be traced. It sets out a taxonomy that shows the four different levels of social analyses and the three types of research methodologies that have been applied to investigate the

opportunities and challenges associated with producing extractive resources. Tracing the main debates on extractive resources sector governance within the space created by the taxonomy, the thesis shows how the policy advice associated with the global advocacy agenda has been conceptualised and where its respective strengths and weaknesses lie.

1.5.1 High-level questions

To prove the hypothesis set out on page 30 - that much of the exiting work on resource sector governance has been slanted towards a particular type of theoretical approach that has prompted a global agenda, and a corresponding action agenda, to develop in one particular direction - the thesis is guided by three high-level questions that will be answered in chapter 7. The first question takes a reflective step back and asks: *how have policy conclusions on extractive resources sector governance come about, and how have these influenced the global agenda?* The second question observes the present and asks: *how do proponents of the global agenda associate extractive resources sector governance with the complexity of, and the challenges posed by, institutional analyses?* The third question looks forwards and asks: *what are the strengths and weaknesses of the existing scholarship and what do these imply?* Chapters 2 to 6 provide the substance to answering these questions.

1.5.2 Structure and chapter questions

Chapter 2 starts off with the question: *what have been the main debates on the opportunities and challenges of countries producing extractive resources?* This literature review identifies three main debates and summarised the policy conclusions of each of these. The chapter's summary identifies four open questions that guide the structure of the next four chapters. These questions are reflective of the poor conceptualisation of 'governance' as a quasi-synonym for 'good institutions'.

Chapter 3 poses the question: *what actually are institutions?* Because the literature summarised in chapter 2 has focused on institutions as the condition that can explain the variance in outcomes achieved by producer countries, this chapter explores the ontological and methodological bases of this literature. The chapter develops a taxonomy that juxtaposes the different levels of social science analyses against the types of research methodologies that this body of literature has applied. In short, the chapter lays open how these two dimensions have influenced scholars' views on the way institutions affect outcomes.

Chapter 4 asks: *how do institutions change?* It explores the insights on institutional reforms gained from the broader social science literature to recognise some of the challenges associated with the conclusion that producer countries need to improve the quality of their institutions. This chapter draws specifically on the literature on property rights to identify what social scientists tell us about the development of sector legal frameworks as the key set of rules that shape the relationship between producer countries and resource developers.

Chapter 5 is concerned with the question: *how are institutions enforced?* It focuses on state-society relations and, specifically, on the role of 'developmental states' to steer processes towards the enforcement of public policy decisions and new rules that achieve broad-based economic, political and social development.

Chapter 6 picks up from the specific focus on property rights and sector legal frameworks introduced in chapter 4, to labour on the question: *do existing institutions matter for the design of interventions aimed at improving institutions?* This question is not answered, but the chapter picks up on the focus on sector legal frameworks introduced in chapter 4 to recalibrating the ignorance of the liberal institutional reform agenda vis-à-vis institutional legacies and path dependencies.

Chapter 7 draws out the answers to, and the implications of, the three high-level questions that underpin proving the thesis' hypothesis.

Chapter 8 provides a brief discussion of the type of heuristic approach to institutional analyses that might serve practically minded policy analysts going forward. Chapter 9 concludes.

1.6 Originality and audience, potential and limitations

The thesis connects three sets of literature that are not often brought together. These include the voluminous academic and popular literature on the 'resource curse' and the good governance of the extractive resources sectors; the historical and contemporary literature on economic development; and the comparative public policy literature that usually focuses more on OECD countries. The purpose for bringing these sets of literature together is to provide a new perspective for considering the opportunities and challenges facing producer countries. The literature on 'resource curse' and good sector governance has generally been ignorant of the insights provided by the wider social science literatures on public policy processes and on the sociology of economic development.

The thesis provides a conceptual contribution that seeks to take a fresh look at the governance of the extractive resources sectors, combining academic debates with the actions taken by producer country governments, resource developers and third parties. It deliberately does not test a hypothesis against empirical data for the objective to offer yet more generic policy advice. Instead, it seeks to provoke an alternative way of thinking about a topic that has received much attention in policy advisory circles and among donors prepared to put money into funding programmes and projects aimed at improving the governance of the extractive resources sectors. The insights and implications brought

out by connecting bodies of research with few previous connections could be of relevance for strategic thinkers and shapers working with resource developers, producer countries and think tanks, as they observe the dynamics of global energy and minerals markets.

1.7 Definitions

For ease of reference, the thesis uses the following definitions:

Extractive resources sectors: these include the oil, gas and minerals sectors; not excluded are other resources sectors such as agriculture or forestry.

Extractive industries: the sum of corporate activities involved in exploring and producing oil, gas and mineral resources.

Producer countries: the countries that produce oil, gas and minerals; they may be producing these for domestic consumption or export; no particular production threshold is applied.

Resource developers: the corporate entities exploring and producing extractive resources; resource developers can be individual multinational or national companies, or comprise of a consortium of companies; companies could be privately owned or state owned. The latter are referred to as national oil companies (NOCs) and/or national mining companies (NMCs).

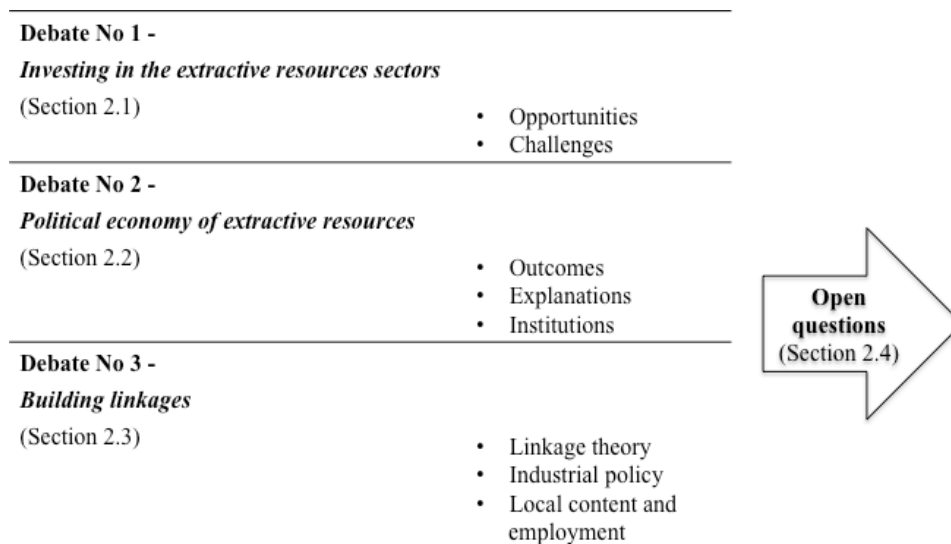
2. Literature review¹⁷

This chapter provides a review of the literature on the governance of the extractive resources sectors. It divides this literature into three main debates that are set out in Figure 3.

- **Debate No. 1** captures the opportunities associated with investing in the extractive resources sectors.
- **Debate No. 2** covers the extensive literature on the political economy of extractive resources, which includes that on the political economy of ‘resource curse’.
- **Debate No. 3** focuses on the evolving debate on building linkages between the extractive resources sectors and other economic sectors.

The next three sections (Section 2.1, 2.2, and 2.3) cover each of these debates in turn.

Figure 3: Key debates on resource sector governance



Source: author's figure.

¹⁷ Some sections of this chapter have drawn on Dietsche (2007) and Stevens and Dietsche (2008).

The fourth section (Section 2.4) compares the policy conclusions of these three debates in relation to the global agenda on the governance of the extractive resources sectors. It identifies four unanswered questions, where each of these questions relates to one of the four quadrants introduced in Figure 1.

2.1 Debate No 1 - Investing in the extractive resources sectors

Economic growth theories have shaped the basic thinking about the economic impacts of capital investments in the resource sectors. Building on these, cross-country comparisons have provided the evidence for the argument that there is a positive association between opening up to foreign private investment and economic performance. Both strands of work have underpinned the policy conclusion that countries endowed with extractive resources should exploit this comparative advantage. The basic policy conclusion has been that these countries should liberalise their extractive resources sectors to support economic growth and, where necessary, recovery.

2.1.1 Economic growth theories

Growth theories have provided economists with the basis for conceptualising the impacts of investments in the extractive resources sectors on the economic performance of producer countries. These theories set out mathematical equations deploying economic performance as a dependent variable on one side of the equation. On the other side, theoretical propositions explicate how possible independent variables relate to each other to explain economic performance. Among these variables could be one or several capturing investments in the extractive resources sectors.

Classical growth theory put forth the proposition that improvements in labour productivity drive economic growth. This view changed with the introduction of the Harrod-Domar model in the 1940s. It challenged the assumption that there is a fixed

capital/labour ratio and proposed that a country's productive capacity was proportional to its stock of machinery. Therefore, an increase in economic output would have to result from the accumulation of more capital.

Where this capital came from did not matter. The Harrod-Domar model also suggested that potential gaps in domestic financing, whether from the private or the public sector, could be addressed by bringing in capital from abroad. Foreign investment could finance the development of export-oriented industries, such as the extractives, which would then generate the foreign exchange needed to purchase the foreign goods and services needed to diversify and develop other economic sectors.

Neoclassical growth theory extended the Harrod-Domar model in the late 1950s and dominated academic thinking throughout the 1960s and 1970s. It stressed that accumulating more capital would face the problem of diminishing rates of return. Once countries got to this point, labour productivity could only be improved with technological progress. This turned the attention back to labour productivity as the driver of economic growth, but it also supported the argument that foreign investment could serve as the conveyor of technological progress.

From around the mid-1980s a new generation of economic growth theories gained prominence (Eggertsson 2005). These theories were prompted by the empirical observation that capital was not flowing from richer to poorer countries, despite apparent shortages in domestic capital and gaps in technology. This provided the entry point for the proposition that all production inputs are ultimately reproducible capital. The focus on external factors was abandoned. Instead, it was suggested that economic development ultimately results from changes in domestic factors improving labour productivity (Romer 1994).

The proponents of endogenous growth theories have explored various hypotheses, honing in on specific domestic production input factors and the policies that affect these. For example, these have included investments in human capital (e.g. education) and in research and development (e.g. innovation). The argument has been that these factors are associated with *positive externalities* that underpin technological progress and ensure that returns on capital do not fall.

Economic growth theories have contributed at least three positive messages to the question of how investing in the extractive resources sector can support the economic performance of producer countries. The first message has been that such resources provide initial assets to the country that can be transformed into other types of public and private capital. Second, if a country lacks the initial capital required to develop extractive resources and bring these above the ground, foreign investment could fill the domestic financing gap. If these assets were then sold abroad, the foreign exchange that would be generated could be used to import the capital goods that other economic sectors might require. The third message has been that foreign investment can provide additional benefits, if it is associated with technology transfers, human capacity building or other investments in the productive capacity of country's economy.

However, it is worth highlighting that endogenous growth theories have also highlighted a strong caveat. The long-term opportunities associated with capital investments ultimately hinge on whether they contribute to improving a country's domestic productive capacity. This poses a challenge for the extractive resources sectors, because they can operate as economic enclaves. Extractives projects are often set up to source production input factors from abroad, which limits the linkages that are built in the domestic economy.

2.1.2 Attracting foreign investment

Many low- and middle-income countries experienced severe economic crises from the mid-1980s onwards. These are thought to have resulted from the major economic shocks that took place from the mid-1960s until the mid-1990s (Crowson 2007), following a period of state interventionist economic policies that had been supported by the Harrod-Domar model. At the time the proposition had been that a ‘big push’ of public investments in strategic sectors of the national economy could be the engine that drives economic development. In the aftermaths of World War II and the decolonisation period, many countries set up new, or strengthened, national oil and mining companies (NOCs/NMCs). Import substitution policies aimed at protecting nascent industries were also pursued.

In the oil sector, this change in the economic policy stance of producer countries culminated in the dramatic shift in the balance of power away from the major private international oil companies and towards the governments and their national oil companies of the countries that formed the Organization of Petroleum Exporting Countries (OPEC) (Stevens 2013). The oil price spikes of the 1970s affected demand, and subsequently most hurt those countries producing minerals (Crowson 2007). Having heavily invested in their nationally owned companies, many countries were faced with persistent over-capacity and unsustainable financial commitments. Further shocks followed, with the break-up of the Soviet Union and the liberalisation and privatisation policies that were introduced in the aftermaths. Facing internal difficulties to cut back on public expenditure that they had committed to in the earlier period, minerals producing countries ran up unsustainable macroeconomic and fiscal positions. Finally, they were left with no other option but to call for external help from the international financial institutions (IFIs).

The policy question at the time was how these countries in distress could attract foreign private investment as an option for digging themselves out of their economic trenches. The economic thinking at the time was, at least in part, still guided by the Harrod-Domar model and its emphasis on the need for capital (Easterly 2002, Rodrik 2007). However, it was also influenced by public choice theory, which argues that ‘state failure’ in the context of the state-led development agenda had been the main cause of the economic distresses that countries were facing. Its proponents advocated more liberalisation and privatisation of state assets. In addition, the emergence of neoclassical growth theory stressed the benefit of technology transfers associated with foreign private investment. At least with respect to the mining sector, the ideological stance of public choice theory could also be cross-referenced to an early golden period of international investments throughout the late 19th and early 20th century (Humphreys 2013).

Called to help countries restore their macroeconomic and fiscal positions, international advisors from the IFIs drew on two interrelated reform proposals. The first was to privatise state operated economic sectors. This meant dismantling the nationally owned companies and selling their assets to foreign private investors. Across the global mining sector privatisation was so sweeping that by the early 2000s only a few national mining companies were left (UNCTAD 2007).

The same level of privatisation was not introduced to the oil and gas sectors. With the exception of some OECD countries, governments largely retained ownership of their national oil and gas companies. The big producer countries in the Middle East and a few elsewhere came to dominate the global market, not least because of OPEC. Meanwhile exploration activities in the more peripheral countries were temporarily cut back until global demand started to rise from the early 2000s, triggered by growing demand from Asia.

The second reform proposal was to review sector legal and regulatory framework to provide attractive terms, that would further encourage private foreign investors to take up these opportunities. One of the seminal policy reform documents was Onorato (1995), setting out the key elements for reforming legislative framework to attract foreign investment in the petroleum sector.¹⁸ For example, this document proposed the use of model contracts as the starting point of negotiations between resource developers and producer countries. IBRD/World Bank (1996) laid out a similar reference framework for the mining sector. Other documents that captured the thinking at the time include World Bank/IFC (2003) and Otto and Cordes (2002).

An influential legacy issue at the time was the concerns of potential private investors over future repeats of the expropriations and sector nationalisations that took place in the aftermaths of WWII and the decolonisation period. International commodity prices continued to be very low throughout the 1990s. This meant that attractive legal and fiscal terms were seen as a necessary prerequisite to encourage international resource developers and their financial backers to re-enter territories where at least some of them had been victims of nationalisations in the post World War II period.¹⁹

The privatisations and sector legal and regulatory reforms went alongside wider structural adjustment efforts. Reform packages were framed in the context of the then prevailing ‘Washington Consensus’, which proposed a series of far-reaching top-down measures to open up countries to foreign investment and trade, and liberalise their domestic markets.

Much has been written about this general reform context. The challenges experienced in sustaining these reforms have been extensively discussed (Ahrens 2000, Easterly 2002,

¹⁸ This document is framed to draw on the technical assistance that had been provided to reform the petroleum sectors of the countries of the former Soviet Union. See the subsequent work by Jones-Luong and Weinthal (2001, 2010) on the mixed success of these reforms.

¹⁹ For example, the Fraser Institute’s annual ranking on the competitive attractiveness of countries based on surveying mining companies was first published in 1997.

Rodrik 2007, Noman 2012). In essence, the ‘Washington Consensus’ had overpromised on its expected deliverables, its reforms were too technically focused, and it had ignored important political economy issues, including the role of the public sector in supporting economic transformation. Nevertheless, the implementation of at least some aspects of the ‘Washington Consensus’ has supported improved macroeconomic performance.

In the 1980s and 1990s, many policy advisers were optimistic that attracting foreign investment would support the recovery of producer countries and stimulate their economies. At the same time, the challenge of attracting foreign investment was almost exclusively framed as a bilateral, zero-sum bargaining process between resource developers and governments. This view is particularly obvious in the literature on extractive resources taxation regimes (ICMM 2009). In the context of a low commodity price era, the notion of the ‘obsolescing bargain’²⁰ also prompted investors to seek investment protection through an extensive network of international investment treaties and recourse to international arbitration for the settlement of potential disputes (Wells and Ahmed 2007, Maniruzzaman and Munir 2008, Cameron 2010).

Until the early 2000s, little attention was paid to the fact that the administrative capacity of producer countries’ governments, along with other domestic conditions more generally, underpins the enforcement of investor-friendly sector legal and regulatory frameworks. It would also seem that the insights put on the table by endogenous growth theories had gone unheeded, that the long-term positive impact of foreign capital investment rests with its contributions to improving the host country’s domestic productive capacity.²¹

²⁰ This term was first coined by Vernon (1971).

²¹ Oxford Policy Management (2013b) provides a case study on the efforts made by Zambia in the late 1990s to revive its mining sector from its protracted slump of the 1970s and 1980s, but also the many challenges the country has been facing for decades. The author has contributed to the analysis underpinning this study.

2.1.3 Challenges

From the early to mid-1980s, two challenges associated with investing in the extractive resources sector have also been recognised. First, economists became increasingly aware that, if they are focused primarily on exports, foreign investment in the extractive resources sectors could pose serious macroeconomic challenges. Second, resource developers have had to respond to negative local-level impacts resulting from the development of large-scale extractives projects. This has prompted the development of international standards on corporate environmental and social performance.

2.1.3.1 Macroeconomics

The early literature on the macroeconomic challenges included Corden and Neary (1982), Neary (1986) and Gelb (1988), with the IMF and others adding country-focused technical follow-up studies.²² The most widely discussed challenge is ‘Dutch Disease’, coined after the Dutch experience of discovering and developing on-shore natural gas fields in the 1960s, when the country subsequently experienced a decline in exports in its other traded sectors (Ebrahim-Zadeh 2003). Several historical experiences showing similar effects elsewhere have also been documented.²³ The negative impact is an overvalued exchange rate undermining the international competitiveness of the non-extractive traded goods and services sectors. This happens because the exportation of extractive resources provides a country with the foreign exchange necessary to import more tradable goods and services. However, it also prompts a rising demand for non-tradable goods that can only be produced domestically. This then results in domestic production inputs being moved out of the non-extractive traded sectors and into the non-tradable sectors, for example construction and services. As the domestic demand for these inputs rises and supply is

²² See for example, Iimi (2006), Segura (2006), Ismael (2010).

²³ Among the most often quoted examples many refer to Latin America in the 19th and 20th century, including guana production in Chile, rubber production in Brazil and coffee production in Columbia. The negative Dutch experience lasted shortly. In the Netherlands, the fear of de-industrialisation linked to Dutch Disease did not actually materialise.

constrained, it increases prices. This can then lead to an appreciating real exchange rate, which can make the production of non-extractive traded goods and services become less competitive internationally. Cheaper imports from abroad may also compete with the domestic consumption of these goods and services. Over time, this can then lead to a country becoming specialised in the production of non-tradable goods and experience, which can also result in more volatile relative prices that could have further negative knock-on effects via the domestic financial market (Hausmann and Rigobon 2003).

Countries with an already diversified economy generally suffer less than those specialised on exporting primary resources, because they can more easily respond with changes in the structure of production (Hausmann and Rigobon 2003). It is also not a foregone conclusion that an appreciating real exchange rate is a problem *per se* (Sachs 2007). However, it poses a serious problem if the suffering tradable sectors would have been critical for the country's overall economic and social development, by creating employment for the next generation of skilled workers able to move out of subsistence existences, for example.

In general, those who looked at 'Dutch Disease' from a theoretical perspective agree that negative impacts are not inevitable. There are macroeconomic measures that governments can pursue to manage the exchange rate with the help of their central banks. Fiscal and other policy measures can also be pursued to support the exposed tradable sectors.

A second macroeconomic challenge is the volatility of international commodity prices, resulting from inelastic supply. Because extractive resources projects are capital intensive, once they have come on-stream they will continue to operate and supply international markets to cover fixed costs even when prices have fallen below the total cost recovery limit. Price volatility then translates into volatile resource revenues, which can pose a serious fiscal challenge for producer country governments. Before they

accommodate higher public expenditure levels, governments would have to assess whether price rises are permanent or temporary. However, once they have committed to higher levels of public spending, it becomes politically and economically costly to adjust these downwards when resource revenues are squeezed. This was one of the problems that led to the economic crises of the 1980s and 1990s.

A related fiscal question is how to find the right balance between public investment and consumption spending. While public investment spending could be more temporary in nature, consumption spending has to be sustained over a longer period of time in order to positively impact a country's productive capacity. For example, a country could over a shorter period of time invest in upgrading its public education infrastructure. However, in order to provide more comprehensive education services, it has to work on improving recurrent education expenditure and back this expenditure with efficient education policies.

A third set of challenges comprises microeconomic transmission mechanisms that arise from supply shortages. Where the extractive resources sectors dominate the domestic economy they can crowd out capital and other production input factors from the non-extractive economic sectors. This can have detrimental effects on the long-term economic performance of the country and on social development. For example, skilled labour and other production inputs that are in short supply could become too expensive for domestic manufacturing industries. Domestic entrepreneurs may then move away from investing in more labour intensive local industries and instead set up import businesses to sell consumer goods to those small constituencies that are directly employed by the extractive resources sectors. Coupled with poorly developed education and skills-development systems, large segments of society may remain trapped in informal subsistence existences.

Recognising these three macroeconomic challenges has prompted the development of suitable counter measures. The IMF in particular has focused on the combined fiscal policy challenges that result from the various transmission mechanisms discussed above (Davis et al 2003, Neumayer 2004, IMF 2007b, IMF 2010).²⁴ The empirical experiences of individual countries have further supported the emphasis on fiscal policies. The positive experiences have included, for example, Norway (Skancke 2003), Botswana (Sarraf and Jiwaji 2001, Acemoglu et al 2003, Lange and Wright 2004, Iimi 2006, Clausen 2008, Pegg 2012) and Chile (ICMM 2007a, Guajardo Beltrán 2012, Orihuela 2013), whereas the negative experiences have included Nigeria and Venezuela (DiJohn 2005).

Although the emphasis on fiscal policies has gained strength over the years, more recently some self-criticism has also been applied. A new IMF publication on the emerging architecture of public financial management (PFM) takes stock of the innovations that have taken place in this field over the past two decades (Cangiano et al 2013). This publication re-emphasises that PFM systems play a very critical role in the developmental outcomes that producer countries can achieve. However, it also recognises that proposals for PFM reforms have often been poorly designed, and that they have neglected to appropriately take into account country-specific conditions. Too often reforms have been focused on countries adopting specific fiscal institutions, such as natural resource funds or other special fiscal rules, that have replaced and/or undermined the integrity of the overall budget process and budgetary institutions more generally (Dabán Sánchez and Héris 2013).²⁵

²⁴ This book primarily set out the technical optimal solutions to these challenges, but it also hinted at some political context variables. These included the impact of political regimes type on fiscal policy decisions and the trend observed at the time to share oil revenue with subnational governments.

²⁵ Another IMF publication on the taxation of petroleum and minerals has sought to make fiscal policy issues more accessible to a wider audience, not least emphasising administrative and institutional issues to which the IFIs and other development organisations had paid less attention in the past (Daniel et al,

The fourth macroeconomic challenge is the enclave nature of many extractive projects, which limits the sectors' contribution to improving a country's domestic productive capacity. Although it was briefly discussed in sub-section 2.1.1 as the caveat flagged by endogenous growth theories, this challenge has not been specifically addressed here. Instead, it will be picked up by section 2.3 as a part of the Debate No 3 on building linkages between the extractive resources sector and other economic sectors.

2.1.3.2 Project level social performance

With the inflow of foreign private investments funding large-scale export oriented projects in low- and middle-income host countries, negative environmental and social impacts are often felt most immediately in the geographic locations where such projects are being developed. Several tools have been developed for assessing and managing these impacts. These tools have largely been applied in isolation from recognising and managing macroeconomic challenges. The same applies to the political economic challenges that will be covered in section 2.2.

Environmental impact assessments (EIAs) have become a common feature of appraising and planning the development of large-scale extractives projects. They have become part of the internal governance frameworks of international resource developers and/or are a legal and/or regulatory requirement set by the producer countries as part of their licencing and permitting processes. Social impact assessments (SIAs) are sometimes incorporated into more comprehensive Environmental and Social Impact Assessments (ESIAs). This integration makes sense particularly where environmental and social issues are closely related. For example, in coastal areas offshore petroleum activities can negatively impact the livelihoods of fishing communities.²⁶ Similarly, mining activities can negatively

2010).

²⁶ What constitutes a 'community' is a contested issue and is defined differently in different contexts and among different organisations. For a discussion on this see Chindo and Bradshaw (2013).

impact agricultural communities where they affect water and other surface resources. For example, in Peru the majority of mining related conflicts relate to water and land-use (ICMM 2013b). However, environmental and social impacts do not always overlap geographically. For example, the environmental impact zone of a potential oil spill, which may set the boundaries for conducting an EIA, need not overlap with the geographical area that may be affected by inward-migration of workers or the downstream activities associated with upstream projects.

How environmental and social impacts are assessed and managed has evolved over time (Vanclay and Esteves 2011). Since the late-1980s, a diverse range of international conventions and regional and national law has emerged (Harvey 2011, Wagner and Armstrong 2010). The environmental movement that started in the 1970s triggered some of these. Several non-legal norms and guidelines have also been developed to govern the relations between extractive industry companies and local communities. For example, these include the UN Global Compact, the Global Reporting Initiative (GRI), the Voluntary Principles on Security and Human Rights (VPSHR), and the concept of Free, Prior and Informed Consent (FPIC) associated with the United Nations Declaration on the Rights of Indigenous People.

An important development in this area has been the Sustainability Framework and the Environmental and Social Performance Standards of the International Finance Corporation (IFC). These standards started with the ‘safeguard policies’ that the World Bank Group had put in place in the 1980s to address some of the negative impacts associated with Bank-financed projects, for example involuntary resettlements. By the early 2000s, these policies were no longer considered appropriate, not least because international non-governmental organisations successfully put pressure on the World Bank Group to do more. By 2006, the IFC published the first edition of its comprehensive

Environmental and Social Performance Standards and associated Guidance Notes, set under an overarching Sustainability Framework.²⁷ After an 18 months review process, the second edition of this Framework and the Standards came into force on 1 January 2012. The group of banks with investment interests in extractive industry projects that have subscribed to the Equator Principles since 2003, now also make it a mandatory requirement to comply with the IFC Standards and Guidelines.²⁸

Extractive industry companies have adapted to this development by incorporating the IFC Standards and Guidelines into their own internal governance frameworks and filtering these down their supply chains. This has led to the professionalisation of corporate social performance, including attempts to measure the value of this work (Davis and Franks 2011, Kitzmueller and Shimshack 2012). At least in part, it has also led to a move away from more paternalistic approaches to engaging with local communities, such as the provision of all-encompassing mining towns and corporate philanthropy. The new approach has turned towards strategic social investments, for example in projects that support enterprise and skills development.

Another recent development has focused on human rights, prompted by several cases of alleged abuses involving businesses. In 2005, the UN appointed Professor John Ruggie as Special Representative to the Secretary-General with the remit to identify and clarify the human rights responsibilities of businesses. This culminated in the *UN Guiding Principles on Business and Human Rights*, approved by the UN Human Rights Council in 2011.²⁹ These principles draw a distinction between the duty of states to protect human rights, the duty of business to respect these duties, and their joint responsibility for providing access to remedies for the victims of human rights abuses. The consequences

²⁷ http://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/ (last accessed: 26.09.2013).

²⁸ <http://www.equator-principles.com/index.php/about> (last accessed: 26.09.2013).

²⁹ http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf (last accessed: 02.10.2013).

of the Guiding Principles are still evolving (Drimmer 2010, Kemp and Vanclay 2013). However, they have already been incorporated in a range of extractive industry focused business guidelines and standards and may in future also be transposed into national law.

These more recent developments have not been without challenges. Kemp et al. (2012) have noted the rise of an “audit culture”, where company reporting serves to demonstrative compliance and produces performance data to measure risks and/or effectiveness. Their concern is that such a culture does not support the original intentions that stood behind the development of the various standards and guidelines. These were intended to build enduring relationships and positive rapports with local communities.

Vanclay and Esteves (2011) are similarly critical. They argue that when social impact assessments become a regulatory requirement, as is often the case with EIAs/EISAs, this can undermine their vital function as a tool for, first, communicating and supporting a common understanding of project impacts, and secondly, to initiate coordinated responses to managing these impacts. The essence of this function is indeed to enable the company to respond to and manage these impacts. However, the affected communities, relevant government agencies, and the domestic private sector and other third parties are also critical stakeholders of these assessments. The conclusion is that resource developers are yet to move away from a compliance, risk management and impact mitigation culture to one where businesses, governments, civil society and local communities work out processes through which they can jointly create value (Owen and Kemp 2013). Based on their research in Peru, Rees et al (2012) contend that such a culture shift requires senior management and technical staff to become more attune to, and act on the issues and

concerns flagged by their internal social performance professionals who pick up on the dynamic concerns of local constituencies.³⁰

Others have argued more critically that the limits of corporate social performance activities are exposed in situations where these activities are at odds with corporate interests, in particular with respect with to Corporate Social Responsibility (CSR) and/or Social Investment (SI) activities. For example, Karnani (2010) argues that social constituencies in producer countries should not look towards resource producers to address problems in the provision of public goods and services. This is the responsibility of politicians and bureaucrats and thus an issue that should be addressed through public policies and regulation. Karnani maintains that the provision of public goods and services is not an objective towards which resource developers should divert shareholders' money. Similarly, Wiig and Kolstad (2010) are concerned that strategic CSR/SI activities support patronage and thus, may not support positive institutional development or development more generally.³¹

2.1.4 Section summary

Debate No 1 on investing in the extractive industries has pointed to the opportunities associated with extractive resources as an initial asset that can be transformed into other types of more sustainable public and private capital. Endogenous growth theory has underlined that this asset transformation process hinges on whether investments in the extractive resources sectors have a positive impact on building a country's domestic productive capacity over the medium to long term. Lederman and Maloney (2007) put it

³⁰ For a further critique on the internal organisational challenges faced by resource developers, see Kemp and Owen (2013).

³¹ There is new literature emerging that seeks to identify under what conditions corporate entities and other third parties are able to provide public goods and services in geographical areas where limited statehood prevails. See Krasner and Risse (2014), Hönke and Thauer (2014) and Lee et al (2014). The work of these scholars sits in the space of Quadrant 2 of the thesis' conceptual framework.

in the following manner: *“Natural resources are assets for development that require intelligent public policies that complement natural riches with human ingenuity”* (p. 10).

This Debate No 1 has recognised that macroeconomic policies are critical, particularly if investments are focused primarily on supporting export-oriented extractive resources sectors. Much emphasis has been placed on fiscal policies. The more recent literature signals a cautious shift away from advocating special fiscal measures targeted specifically at resources revenues, such as natural resources funds. In turn, it stresses strengthening public financial management more generally, as well as the broader public policies that underpin the allocation of public expenditure and the provision of public goods and services. At the project level, Debate No 1 has recognised the value of good corporate social performance. This involves first assessing project-specific impacts on host communities, and then managing and/or mitigating these.

The challenge for Debate No 1 is the disconnection between the recognition of the top-down macroeconomic opportunities and challenges on the one hand and the bottom-up local project-level impacts on the other. From the top end, the focus has mainly been on national-level fiscal policies as the tool with which to leverage the opportunities and manage the challenges. This has come at the expense of recognising that a much wider array of public policies ought to be deployed not only at the national, but critically also the sub-national level. From the bottom end, corporate social performance aimed at managing localised project-level impacts has not contributed to mitigating macroeconomic challenges, nor has it been geared towards leveraging on the macroeconomic opportunities. While much attention has been given to the question how resource developers can improve their relationships with local communities, the structures underpinning the relationships between local communities and national as well

as sub-national policy makers and bureaucrats have rarely been looked at systematically to understand why the top and the bottom do not match up.

2.2 Debate No 2 - Political economy of extractive resources

Since the mid-1990s, a substantial body of literature on the political economy of extractive resources has emerged. The objective of this literature has been to reach beyond the macroeconomic ‘resource curse’ mechanisms identified in the previous section. Instead, it has focused on the political and social factors that underpin economic performance, as well as a wider range of political and social outcomes. Many of those studying the political economy of extractive resources have focused primarily on negative outcomes. Some have also turned to the study of political economy to discuss how, and under what conditions, resource-led development might be possible.

This section tracks the evolution of Debate No. 2 and its policy conclusions. Several reviews of this literature already exist. An early review was Ross (1999) who pointed to the two different approaches that economists and political scientists had taken to look at this issue. Rosser (2006a) identified three different strands to this literature based on the different outcomes that proponents focused on. Several articles have provided, or commented on, policy recommendations, including Stevens (2003, 2006), Weinthal and Luong (2006), Rosser (2006b) Humphreys et al (2007), Stevens and Dietsche (2008), Van der Ploeg (2008), and Barma et al (2012).

The objective of the review presented here is not to confirm or reject whether a political economic ‘resource curse’ exists, how it comes about, or what can be done about it. Instead, similar to Benner et al (2010) and Ostrowski (2013), it takes a step back to reflect on *how* the two main schools of thought have looked at the political economy of extractive resources and what they have concluded. The first sub-section reviews the

outcomes that those studying the political economy of the extractive resources sectors have been interested in. The remaining sub-sections discuss how they have measured countries' dependence on the extractive resources sectors and what causal linkages the two main schools of thought have explicated. The final sub-section pulls together the policy conclusions that they have promoted.

2.2.1 Observing outcomes

Expanding the work of the macroeconomists, those studying the political economy of the extractive resources sectors have observed three types of outcomes: poor economic performance; 'bad' political regimes; and countries not delivering on social development, including suffering from conflicts and civil wars (Rosser 2006a).

2.2.1.1 Poor economic performance

Poor economic performance has received the most attention. Proponents could build on the work of the growth theorists and macroeconomists who had made the case that investing in the production of extractive resources presents countries with opportunities. Those studying the political economy of the extractive resources sectors were not satisfied with the analyses and the policy conclusions that had resulted from the analysis of the macroeconomic challenges of export-oriented investments. They thought it was necessary to better understand why governments seemed unable and/or unwilling to adopt the technical counter measures that they were advised to pursue in order to avoid the macroeconomic 'resources curse'.

Further questions have been prompted by the experience of countries like Peru or Ghana, where macroeconomic policies and aggregate economic performance have generally been good and where companies have arguably made real efforts to assess, manage and mitigate project level impacts. Nevertheless, socio-political tensions and conflicts have

kept rising and communities and their local and regional representatives have expressed dissatisfaction with the level of benefits they are receiving. These and other country examples have suggested that there remain analytical gaps in connecting macroeconomic analyses with the individual and aggregate impact of actual projects at the local, regional and national level.

Much of the work on extractive natural resources and economic performance has been prompted by the seminal article of Sachs and Warner (1995) raising the question why, against economists' predictions, countries less dependent on the resources sectors had on average achieved better economic outcomes than those more dependent on these sectors. This article prompted the publication of a series of cross-country statistical analyses that built on economic growth models to demonstrate the relatively poorer economic achievements of producer countries from the early 1970s until the early 2000s. Like the macroeconomists, those studying the political economy of the extractive resources sectors have often also focused on fiscal issues. However, these proponents have paid more attention to the potential incentives and the structural conditions underpinning fiscal policy decisions.

2.2.1.2 Bad political regimes

A second body of work has been concerned about the prevalence of 'bad' political regimes in producer countries. Some studies have simply asked whether the presence of an extractive resources sector correlates with 'bad' political regimes. Ross (2001) was one of the first political scientists to quantitatively test this question. Others conducted case studies to draw out the linkages between the extractive resources sectors and *rentier* states (Karl 1997, Hodges 2004). Jenson and Wantchekon (2004) have compared several Sub-Saharan African countries to test whether greater reliance on the resources sectors poses a greater challenge to consolidate and maintain the democratic transition paths that

many of these countries had embarked upon from the early 1990s (Bratton and Van de Walle 1997). A critical review of the question whether natural resources fuels authoritarianism found that the answers have been sensitive to the data and the methodologies used (Haber and Menaldo 2011).

Another set of studies hypothesised whether political outcomes are affected by the fiscal dependence on extractive resources revenues (DiJohn and Putzel 2000, Moore 2004, DiJohn 2007, Bräutigam et al 2008, ICMM 2009). When countries rely too heavily on the mobilisation of public revenues from the extractive resources sectors, this may compromise more equitable access to public goods and services. Well-positioned elites may capture public funding for the pursuit of their particular interests. Fiscal dependence on the extractive resources sectors could nurture alliances between political and economic elites who would collaborate to uphold ‘bad’ political regimes in order to serve their particular interests, to the detriment of the wider public interest.

2.2.1.3 Poor social outcomes

A third body of literature has focused on social outcomes. Some of this literature has investigated the observation that countries with extractive resources appear to be more prone to conflicts and civil wars. Initial research was framed in a very simplistic manner, juxtaposing a hypothetical economic-rational explanation against an equally hypothetical socio-political explanation, finding that ‘greed’ rather than ‘grievance’ leads rational individuals to fight over resources (Collier and Hoeffler 2004). To test their propositions the authors assigned proxies to these two dichotomously framed hypotheses and subjected them to a statistical analysis. They found ‘greed’ to be of greater statistical significance. However, they not only failed to convincingly argue that the proxies they had used reflect their narrative explanations; they were also unable to explain why greedy individuals would join up to engage in collective combative action (Nathan 2005).

Comparative and country case studies have looked at a much broader range of potential causal mechanisms. Ross (2004a, 2004b) identified some 13 different hypotheses linking natural resources to the onset, duration and intensity of civil wars. Interestingly, he also found that the relationship between natural resources and civil wars is ambiguous. For example, the presence of a resources sector can also encourage different social constituencies to work together. Humphreys (2005) has catalogued a range of possible and rival mechanisms, finding no evidence that resources can systematically be associated with particular difficulties in bringing conflicts to an end. However, he suggests that the resources sectors might have a negative impact on state capacity.³² Snyder's (2006) comparative analysis of Sierra Leone versus Myanmar builds a model that links high value/low volume resources (i.e. *lootable* resources) to both the breakdown, and the establishment of civil order.³³

Others have looked at social outcomes as captured by the social indicators collected by the United Nations and other organisations. Ross (2007) proposes two analytical dimensions to understanding whether extractive resources reduce or increase inequality: 'vertical inequality' reflects the gap between the richest and poorest in a country and 'horizontal inequality' reflects the gap between the better and the less well-endowed regions of a country.

Again, the empirical evidence shows mixed results. In Peru, alongside the growth of the mining sector social indicators have been improving at the aggregate level. However, these improvements cannot be directly attributed to the activities and contributions of the mining industry. There may be an indirect positive impact via this industry contributing more revenue, which may have helped the government to introduce and expand more

³² A similar result is found by de Soysa and Neumayer (2007).

³³ Snyder defines '*lootable resources*' as those characterised by high value but low volume, including diamonds, gold and other precious metals and stones but also illicit drugs. '*Non-lootable*' resources are lower value and high volume, thus they are more difficult to capture for private gain.

effective social policies (ICMM 2013b). In the case of Chile, mining regions show steady improvements in social indicators (ICMM 2007a, Guajardo Beltrán 2012), departing from the absence of such a positive impact in its earlier mining history (Davis 2009). In Zambia, social indicators appear to have worsened in non-mining regions (Oxford Policy Management 2013b). Social outcomes in the oil rich states in Nigeria have been viewed critically, partly because of negative socio-economic impacts of environmental degradation (Chindo and Bradshaw 2013). Goederis and Malone (2011) suggest that in general oil and mining booms temporarily reduce inequality, but that this impact diminishes over time.

Davis and Vásquez (2012) have also confirmed this mixed picture. They have taken a step back to revisit the claim made by political scientists and international NGOs, who argue that the extractive resources sectors negatively affect social development, in order to contrast this with the counter claim put forth by the extractive industries and their supporters, that there can be positive impacts. Admitting some data limitations, they find that neither claim can be substantiated with cross-country statistical evidence. Using longitudinal data covering 57 countries, they assess how economic growth generated from resources extraction affects those at the bottom of the social food chain. They found no compelling evidence for or against either claim. This led them to conclude that caution is warranted in basing policy conclusions on either side's pronouncements.³⁴

Yet many have concluded that the extractive resources sectors produce negative economic, political and social outcomes. This is the view portrayed in the popular press and supported by advocacy groups. Nevertheless, the causal mechanisms producing these observations are not as obvious as these constituencies have implied. Several country and comparative case studies have suggested that the production of extractive resources is but

³⁴ These authors recognise that the limited availability of comprehensive data may have compromised their results.

one of several interrelated variables and conditions that could be responsible for these outcomes. This calls for the development of more sophisticated theory, as opposed to more testing of overtly simplistic hypotheses.

For example, Keen (2005) has argued that in Sierra Leone it was the introduction of economic liberalisation policies that led to the deterioration of several sets of social relationships resulting in conflict. These policies, rather than the mere presence of a diamond-mining sector, contributed to the collapse of the state and thus, the collapse of social order.³⁵ DiJohn (2002) puts forth a similar argument for Venezuela, dismissing the structuralist argument that Venezuela is simply a malfunctioning petro-state. Instead, he associates Venezuela's return to populist authoritarianism with the exaggerated promises put forth in the context of economic liberalisation reforms and the subsequent rise in income inequality. This led to polarised politics and a decline in political stability (DiJohn 2005).³⁶ Eifert et al (2003) have looked at 'bad' political regimes not as an outcome, but they have used this variable to explain variance in the economic performance of producer countries. They identify common characteristics across 'mature democracies' and 'reformist autocracies' because both have been supportive of sound macroeconomic policies. Both regime types can support a longer time horizon for policy decision-making and greater policy coherence. Dunning (2008) has also taken a close look at natural resource wealth and political regimes to explain variations in outcomes across resource-rich countries. His findings suggest that the challenge is not to conduct more empirical testing of theories that predict negative outcomes, but to develop theory that can show when and how resource rents can support democracy by way of easing the distributive battles between elites and the citizens more generally.

³⁵ Di John (2002) makes this argument more generally. Another study on Sierra Leone questions the relevance of global 'good governance' initiatives, including the EITI and the Kimberley Process Certification Scheme (KPCS) to address the real challenges this post-conflict country is facing (Roy Maconachie 2008).

³⁶ For a more comprehensive case study of Venezuela, see DiJohn (2009).

In summary, critical observers caution that, although macroeconomic performances have been improving since the global upturn of commodity prices started in the early 2000s, there is still much left to be done to ensure that the economic growth that this has generated is sustainable and delivers positive vertical and horizontal distributive impacts. The next sub-section reviews the theories and hypotheses that the two main schools of thought have proposed to explain the outcomes observed.

2.2.2 Explaining outcomes

This sub-section reviews three strands of literature explaining why producer countries have experienced poor outcomes on the back of exploiting their extractive resources: the first strand focuses on producer countries' dependence on extractive resources; the second strand associates poor outcomes with the interests and incentives of politicians and bureaucrats; the third strand looks at the structural characteristics of producer countries.

2.2.2.1 Resource dependence

The early political economy literature suggested that resource dependence provides a sufficient explanation for poor outcomes. Those interested in economic performance build on economic growth theories to test whether resource dependence could explain variances in countries' economic performance. Having instrumented resource dependence as an explanatory variable, researchers could also combine this proxy with other explanatory variables to empirically test their theoretical propositions about possible interaction effects.

Proponents have deployed two main measures for 'resource dependence'. *Resource export dependence* has been the most widely used indicator. It captures the value of a country's extractive resources exports as a percentage of the total value of its exports. On

the basis of UNCTAD's trade statistics countries have been deemed to be 'resource-rich' if this indicator exceeds a certain threshold. The IMF suggested a threshold of 25 per cent as the cut-off point above which countries are deemed 'resource-rich' (IMF 2007a).³⁷

There are several downsides to this indicator. First, there is no single data set that captures and compares the many different types of extractive resources that are explored and exploited in each country across the world. This is partly due to the absence of a simple way of valuing deposits and production that takes into account the varying cost structures involved in producing the resources.

Second, international trade statistics only capture those resources that are officially exported and valued at the point of exportation. Hence, the data does not fully capture those countries that use their extractive resources to manufacture other traded goods. The latter include large middle-income countries that are major producer countries but only export a share of their production. Example countries include Brazil and China. The consequence is that the data is already biased towards those countries that use extractive resources exports to finance imports. These are the countries that are more likely to be facing the macroeconomic issues discussed in section 2.1. More fundamentally, Brunnschweiler and Bulte (2008a, 2008b) have shown that the statistical 'resource curse' disappears, when, instead of a proxy measuring resource dependence, they apply another one measuring resource abundance.

Third, data omissions and other challenges with classifications can also be a problem, due to the uses to which the outputs of extractive resources are put. For example, gold is sometimes not counted, because it also serves as an international currency reserve. Omissions may also occur from the way minerals are classified. Recently, Davis and Vásquez Cordano (2013) have taken stock of the empirical literature on the international

³⁷ See also UNCTAD (2007).

trade in mining products. They highlight several challenges with the existing data capturing the value of and value added to mining products. Interestingly, they also found that the less open mining countries have experienced faster growth those that have more liberally opened up to the global economy.

The second indicator is *resource revenue dependence*, measured as the percentage of resource revenues that makes up total government revenue. The 25 per cent mark has also been suggested as the cut-off point for dependence (IMF 2007a). It has been more difficult to consistently compile comparative country data on this particular dimension of public finances, and researchers have had to rely on data sets put together manually by IMF staff.

With the global upturn in commodity prices, more countries have passed these cut-off points. Between 1996 and 2010, the number of countries passing the 25 per cent mark on resource export dependence has risen from 46 to 61 countries (Haglund 2011). In addition to the global commodity price rises, production increases resulting from the investments in large-scale extractive projects developed since the 1980s have also contributed to this picture.

Some researchers have used the resource dependence indicators to inform case selections. For example, Botswana is one of the most mining dependent countries, both in terms of exports and government revenue. However, the country has outperformed its peers. This has prompted several country case studies looking at how it has managed the macroeconomic and the political economic challenges associated with the extractive resources sectors (Sarraf and Jiwanji 2001, Acemoglu et al 2003, Lange and Wright 2004, Iimi 2006, Evans 2007, Clausen 2008, Pegg 2012). Chile is another of these countries for which several case studies exist (ICMM 2007a, Guajardo Beltrán 2012). Orihuela (2012) has built on the comparable economic significance of the mining sectors

in Chile and Peru to explore differences in the political economy of macroeconomic management and associated institutional changes across these two countries.

Observing poor economic, political and social outcomes in association with dominant extractive resources sectors has prompted a search for remedies. This has required more refined explanations connecting dependence on these sectors to observed outcomes. Merely pointing to the opportunities associated with investing in the extractive resources sector, and recognising that there are some macroeconomic and project level challenges, has not provided a sufficient basis for addressing the wider ‘resource curse’ fears of critical observers and advocacy groups.

Those interested in the political economy of extractive resources have drawn on several concepts to fill the gaps left between those pointing to the macroeconomics opportunities and challenges and those focusing more narrowly on assessing and managing project level impacts. Their explanations of why producer countries experience negative economic, political and social outcomes can be grouped into two main schools of thought. At one end of the spectrum are proponents who have focused on *rent seeking*. Subscribing to methodological individualism, they emphasise the personal interests and incentives of politicians, bureaucrats and other individuals in powerful positions. Proponents at the other end of the spectrum focus on structural and institutional characteristics rather than individuals. They emphasise *rentier states* and/or *societies*.

2.2.2.2 *Rent seeking*

This school of thought has emphasised the interests and incentives of politicians and bureaucrats and why their rational decisions might lead to negative aggregate outcomes. These explanations propose that those holding power will seek the rents associated with resources extraction for personal gain. If possible, they will engage in corrupt political

and business practices and they will rob their countries of the development opportunities that these sectors could potentially provide (as discussed in section 2.1). By extension, it is also assumed that in order to safeguard their business interests private multinational and national companies are willing to connive with these individuals.

Proponents have drawn inspiration from public choice theory, applying the microeconomic assumptions of rational individuals to posit that politicians and bureaucrats are guided by their self-interests to exploit their countries' extractive resources for personal gain, which ultimately results in 'state failure'. In its more extreme interpretation, this explanation comes close to suggesting that poor results should not come as a surprise, nor should they be viewed as a policy failure resulting from myopia.

Proponents have typically built formal models to derive hypotheses about the macro-level impacts of such behaviour, which they have then tested against comparative data sets applying multiple regression analyses. Among the numerous works of this kind are Robinson et al (2006) applying a probabilistic voting model to show why politicians tend to over-extract, Bhattacharyya and Hodler (2010) applying a game-theoretic model to show that resource rents increase corruption if the quality of democratic institutions is relatively poor, Collier and Hoeffler (2004) testing whether 'greed' or 'grievance' causes civil wars and conflicts, and the latter's work on the impact of democracy on economic performance (Collier and Hoeffler 2006).

2.2.2.3 Rentier states and societies

The second school of thought has subjugated the decisions of politicians, bureaucrats and other agents to structural characteristics of producer countries. They describe these as *rentier states* and/or *rentier societies*. Structural analysts have also looked at social relationships to identify the relative power of different social constituencies. For example,

Terry Karl's analysis of Venezuela emphasised the battle over the distribution of rents to identify how this has negatively impacted the relationships between political elites, business interests, state institutions and society at large (Karl 1999).

Another line of argument has been that the revenues generated from the extractive resources sectors allow rentier states to diffuse pressure to democratise. States that can rely on resource rents can keep domestic taxes low, while they can also afford to unproductively redistribute spending to satisfy political constituencies. If challenged, they can still afford to pay security forces to control political opponents. These characteristics mean the demand for, and the supply of, channels for political representation are weak, resulting in political-administrative systems that are not accountable to citizens (Moore 2004; Ross 2001). By extension, rentier states are likely to feature 'bad' political regimes that undermine social transformation (Ross 2001, Jenson and Wantchekon 2004, Rosser 2006a).

Structural analysts stress path-dependencies and historical trajectories, as opposed to the time-insensitive arguments put forth by proponents of *rent seeking*. For example, Acemoglu et al (2001) have pointed to the different strategies that colonial European countries adopted in their overseas territories and identify the lasting impact that these have had on contemporary institutional settings and how these underpin outcomes. Wherever Europeans settled in great numbers, colonial administrations set up institutions that encouraged productive investments. Where few settlers laid down their roots, they designed institutions that served the purpose of extracting and transferring rents to the mother country. Acemoglu et al see settlement structures linked to the risk of settler mortality, which in turn was affected by the risk of tropical diseases. They conclude that countries such as Australia or Canada have done better, because a lower risk of diseases has supported the evolution of institutions that have encouraged productive investments.

In contrast, countries in the tropics have generally done worse because the institutional arrangements that were put in place in the past have only ever supported the international transfer of rents.

Another structural explanation is that of Auty (2001a, 2001b), and applied by Woolcock et al (2001), who have argued that the physical characteristics of two types of resources affect the social foundations of producer countries and therefore the socio-political institutions that shape their economies. *Point source resources* are characterised as those where exploitation is capital intensive and ownership is concentrated, typically including large and medium scale oil, gas and mining projects. However, they could also include large-scale plantations and agro-industrial enterprises producing bulk commodities such as palm oil, soya beans, sugar cane, corn or industrial wood. In turn, *diffuse natural resources* are those that require little to moderate capital inputs, where economic opportunities are more widely disbursed, capital requirements are less intensive, and ownership is less concentrated. They typically include medium and small sized farming, but could also include small and artisanal mining.³⁸ The conjecture is that countries with *diffuse natural resources* are less likely to feature negative economic, political and social outcomes.

Both, the *rent seeking* and the *rentier states* school of thought have found common ground in identifying ‘institutions’ as the factor can potentially turn bad outcomes into good ones. The next sub-section explains how their proponents got to this point.

³⁸ Not only are the lines between point source and diffuse natural resources and between non-renewable and renewable resources not clear-cut, but they also vary across countries depending on who holds the primary property rights over such resources. For example, in the United States shale gas resources located beneath the lands of private land owners could be considered a diffuse resource, whereas similar deposits in a country where sub-surface rights are held by the state may be considered a point source resource.

2.2.2.4 *Explaining variance in outcomes*

Both schools of thought have faced the challenge of having a bleak policy outlook. Those emphasizing *rent seeking* could not point to solutions, because they cannot appeal to politicians and bureaucrats to change their presumed rational behaviour capturing resource rents for private gain. Meanwhile, those pointing to hard-wired structural conditions have come close to proposing that countries with the wrong path dependencies should perhaps leave their extractive resources in the ground. However, the proponents of structural explanations have had one advantage over those promoting the rent-seeking argument: by pointing to historical trajectories they could explain variance in outcomes across similar resource-dependent countries. This suggested, at least, that negative outcomes are not inevitable.

Case studies have held up to challenged overtly negative ‘resource curse’ predictions. For example, Acemoglu et al (2003) have attributed Botswana’s relative success as a highly mining dependent country to the survival of its favourable pre-colonial institutions. The story goes that contrary to other countries in the southern hemisphere, Botswana remained relatively neglected during the colonial era. This enabled the country to retain its own political institutions that had traditionally granted local political leaders access to the political decision-making process. These leaders have always been accountable to local communities but have also supported the post-independence political elite to legitimise the protection of private property. Thus, traditional political institutions provided safeguards against the potential abuse of power by the political elite to shape property rights in a way that would have benefited only them. The social contract between rural elites and urban public officials has held the latter to account for the wellbeing of the majority of citizens.

Other countries with positive trajectories include Norway, Chile, the United States, Canada and other OECD countries, where the exploitation of extractive resources is thought to have contributed to the development of diversified industrial economies. Observers familiar with the historical trajectories of these producer countries have been vocal in pointing out that there are ways out of the ‘resource curse’ (Findlay and Lundahl 2001, Davis and Tilton 2005, Crowson 2007, Wright and Czelusta 2007, Davis 2009).

These cases have exposed the inability of rent-seeking explanations to explain these interesting ‘outlier’ cases. This prompted a search for better explanations that could account for the observed variance in outcomes across producer countries. Another motivating factor has been that, if poor outcomes really had to be thought of as inevitable, there would be little scope for policy advisors to look forward and promote or support actions aimed at preventing negative outcomes. The next sub-section takes a closer look at the proposition that ‘institutions’ can turn bad outcomes into good ones.

2.2.3 Institutions and positive outcomes

This sub-section explains the background to the proposition that ‘institutions’ can turn bad outcomes into good ones. It also sets out how this proposition links to the four uses of the governance concept introduced in chapter 1 of this doctoral thesis.

The forward-looking question, *how can producer countries ensure positive outcomes*, has prompted proponents to draw on the broader social science debate on the role of institutions in economic development. This debate had been brought into the development discourse from the mid-1990s onward (Williamson 2000a, Oppor 2008, Mkandawire 2012). Across the social sciences, a more general turn towards institutional analyses evolved from critical enquiries about the fundamentals underpinning modern market economies. Several sub-disciplines rediscovered institutional analyses from

around the 1980s, building on the foundations that proponents, including Max Weber, Emil Durkheim, Talcott Parsons and Ronald Coase, had laid in the first half of the 20th century (Eggertsson 1990, 2005, Knight 1992, Williamson 2000b, 2008, Ricketts 2014).

Economic historians³⁹, political scientists⁴⁰, and economic sociologists⁴¹ developed and rediscovered institutional analyses to explain differences in the economic, political and social trajectories of countries.⁴² This included reconsidering the role of these state and its public authorities in supporting modern market economies.⁴³ Economists added further contributions, based on their work on the theory of the firm, on industrial organisation, and on the problem of collective action.⁴⁴ These different strands resulted in the development of several new theoretical propositions highlighting the institutional foundations of markets and economic systems. Not least, these propositions have corroborated the notion of ‘positive externalities’ that endogenous growth theories have emphasised since the mid-1980s. The caveat is, however, that the quest to better understand institutions resulted in “*a boiling cauldron of ideas*” (Williamson 2000b, p. 610), where many of these have been competing with each other, across and within a wide array of progressive institutional research programmes (Williamson 2008).

Institutional analyses turned into a debate about ‘governance’, when development practitioners tried applying the insights gained from this literature to shape policy reforms and to analyse past policy reform failures (Ahrens 2002, Mkandawire 2012, Andrews

³⁹ Examples include North et al (1966), North and Thomas (1973), North (1990, 2006), North et al (2006), Greif (2006), Mahoney and Rueschemeyer (2003).

⁴⁰ Reviewed by Koelble (1995), Hall and Taylor (1996), Immergut (1997), Thelen (1999).

⁴¹ For a compendium on this literature see Granovetter and Swedberg (2011).

⁴² The OECD country specific literature includes Williamson (1985), Steinmo, Thelen and Longstreth (1992), Hall and Soskice (2001), Eichengreen (2007). For an empirically derived theory on institutional diversity, though not necessarily country focused, see Ostrom (2005).

⁴³ For example Evans, Rueschemeyer and Skocpol (1985).

⁴⁴ For a compendium on this literature see Brousseau and Glachant (2008); see also Coase (1960), Hardin (1968) and further literature referenced in Chapter 4 of this thesis.

2013). In the view of those who conduct institutional analyses, rules are ‘institutions’.⁴⁵ Figure 4 illustrates how this application happened. The figure reproduces the four quadrants introduced by Figure 1 of Chapter 1, setting out for each of these the key questions that the different uses of the governance concept have posed in relation to institutional analyses.

For Quadrant 1 the question is *how do institutions affect outcomes?* Quadrant 2 asks *how multiple actors influence processes to create new or change existing institutions?* Quadrant 3 enquires *how do processes influence the enforcement of public policies?* This question suggests that stipulating rules is not the same as enforcing these. For example, a policy underpinned by the development of new legislation is not enforced simply because the new legislation exists. And finally, Quadrant 4 asks *how it is possible to intervene to achieve desired outcomes?* The question here is whether institutions can be used as a tool to intervene in order to achieve better economic, political and social outcomes.

⁴⁵ The most often quoted definition of institutions is based on Douglass C. North (1990), describing institutions as humanly devised constraints that structure political, economic and social interactions and where these constraints include both formal rules, such as for example laws, as well as informal rules, such as for example social norms and customs.

Figure 4: Key questions raised by the four uses of the Governance Concept

	Results	Processes
Rules (= 'institutions')	Quadrant 1 – <i>How do institutions affect outcomes?</i>	Quadrant 2 – <i>How do multiple actors influence processes to create new or change existing institutions?</i>
Steering	Quadrant 4 – <i>How to intervene to achieve desired outcome?</i>	Quadrant 3 – <i>How do processes influence the enforcement of public policies?</i>

Source: author's figure, adapted from Hyden, Goran et al. (2004)

For those keen to support the achievement of positive economic, political and social outcomes it has been appealing to draw on the insights of cross-country comparative analyses that sit in Quadrant 1 for identifying results-oriented actions in Quadrant 4. Their objective has been to intervene in ways that would ensure better outcome are achieved. This endeavour has suggested that there is *short cut route* from Quadrant 1 to Quadrant 4, whereby the rules associated with good outcomes in one country can be deployed as an intervention to achieve the same outcomes elsewhere. This logic has assumed that institutions can be looked at as a matter of technical design and can be applied generically across different country contexts.

2.2.3.1 Rational choice institutionalism

Those in favour of the rent-seeking argument did not have to look far to suggest how to move down from Quadrant 1 to Quadrant 4. The rational choice version of New Institutional Economics had already put forth the basic proposition that 'institutions' could intercept negative relationships between rational individual actions and aggregate

outcomes. The foundation of this school of thought lies with collective action and transaction cost analyses pointing to inefficient aggregate outcomes and the role that institutions play in coordinating the actions of individuals. The theoretical literature pointed to the role institutions play in preventing market failure, but also state failure. Much quoted is North's definition of institutions as "*the humanly devised constraints that shape human interaction*" (North 1990, p.182). Advances in game theory and several works on how to solve collective action problems (Olson 1965, Hardin 1968) have also brought it to economists' attention that institutions play a critical role in averting negative aggregate outcomes.

Applying a much reduced version of the more complex thinking underpinning the theoretical work, proponents of the rent-seeking argument have hypothesised that better outcomes can be expected, if countries have institutions in place that can constrain the interests of politicians and bureaucrats: these agents are then no longer able to use public resource rents for private gain. To test this hypothesis, they identified proxies measuring 'institutional quality' in order to instrument these variables in multiple regression analyses. Table 1 summarises several of the proxies that have been deployed to measure interaction effects between institutional quality and resources.

Table 1: Proxies measuring institutional quality

•	Political Risk Services: <i>institutional quality index</i> - averages rule of law, bureaucratic quality, government corruption, investment expropriation risk and contract repudiation risk.
•	ICRG score – combining 17 risk components with associated probabilities, many capturing risks to foreign investors.
•	The Polity IV database: <i>polity</i> - measures the level of democracy or autocracy in a country; and <i>democracy</i> - measures the extent to which <i>electoral competition</i> prevails.
•	Database on Political Institutions (DPI): <i>fragmentation of the political field</i> .
•	Freedom House: <i>civil liberties</i> and <i>political rights</i> .
•	Transparency International: <i>corruption perception index</i> .
•	Keefer and Stasavager (2002): <i>checks and balances</i> .
•	World Bank: <i>Six governance indicators</i> - specifically, <i>rule of law</i> and <i>government effectiveness</i> .
•	World Bank: <i>Doing Business Indicator</i> - includes ten indices that evaluate institutional and political bottlenecks in starting and conducting business activities.
•	La Porta et al. (1999): using proxies for <i>settler mortality</i> , <i>expropriation risk</i> , <i>corruption index</i> , <i>fraction of population speaking English</i> , <i>British legal origin</i> .

Source: author's literature review.

More or less plausible narratives have served to close the gaps between the positive statistical relationships identified and the policy conclusions drawn. For example, Mehlum et al (2006a, 2006b) interpret an institutional quality index composed of an un-weighted average of five indexes from Political Risk Services to reflect whether countries had 'producer-friendly' or 'grabber-friendly' institutions. Producer-friendly institutions are defined as "*where rent-seeking and production are complementary activities*", whereas grabber-friendly institutions are defined as "*where rent-seeking and production are competing activities*" (2006a, p. 3). How the chosen indices relate to these definitions remains unclear. Collier and Goederis (2007) interpret that "*the resource curse does not occur in countries with very good institutions*". They measure 'good' versus 'bad' governance on the basis of applying a subjectively chosen threshold to the country rankings of the International Country Risk Guide (ICRG). Again, why the 17 risk components that make up the ICRG and cater towards the concerns of foreign investors should reflect 'good institutions' remains unclear.

Table 1 shows the wide range of proxies that have been used to underpin the general finding that ‘good institutions’ can intercept presumed *rent seeking* behaviour. In many instances, proponents refer to ‘good institutions’ and ‘good governance’ as if they were interchangeable terms. This conceptual laziness has prompted some criticism. Proxies often do not fully capture the attributes that proponents associate with them (Arndt and Oman 2006) and they often also come with health warnings, for example that they should not be used to compare country scores over time. However, these warnings have frequently been ignored (Andrews 2013). Van de Walle (2005) observed that governance indicators have allowed researchers (and/or the readers of their work) to impose their own, potentially biased views on what good institutions are. A fundamental conceptual criticism is that governance indicators are primarily focused on political institutions and the ‘checks and balances’ they entail, but they ignore how the executive and state bureaucracies work (Fukuyama 2013). Thus, too little attention has been paid to states and state structures, and how they accumulate and use power.

In summary, looked at critically, these types of studies have provided little guidance on how producer countries and their international development partners might practically go about improving their institutions. Nevertheless, they have widely endorsed the conclusion that producer countries need to improve their institutions, mainly because producer countries with good institutions have statistically been shown to perform better. Advocacy groups and development agencies have understood this to mean that there is a case for sector reforms, targeted at increasing transparency around resources revenues and, underpinning these, sector contracts and agreements. They have also supported the introduction of sector specific fiscal institutions and revenue sharing mechanisms, and have also seen the revision of sector legislation and regulation as a means to achieve better institutions. Ultimately, however, it remains very unclear how these sector-focused interventions will overall improve a country’s ability to use its extractive resources to

support broad-based and sustainable development.

2.2.3.2 *Structural institutional analyses*

Those supporting the *rentier state* and *rentier society* arguments could also quite easily reinforce the importance of institutions. Not least, for their early case study work they had already built on the insights of historical and sociological institutional analyses. For example, Karl's study of Venezuela (1997) had been explicitly framed at the cross road of the long-standing divide between agency-centred and overtly deterministic structural analyses. Other examples have included Firmin-Sellers (1995, 1996), Haber et al (2003), Clay and Wright (2003) and also the Botswana country case study summarised above (Acemoglu et al 2003).

Structural analysts have identified at least four sources of institutional variance and associated these with the characteristics of the extractive resources sectors and related path dependencies and historical legacies. The work of those pointing to the characteristics of resources production processes has already been summarised above and need not be further elaborated here. This is the argument about *point source* versus *diffuse natural resources* and their impact on the social foundations of producer countries (Woolcock et al 2001, Isham et al 2005). These studies have drawn a link between social relationships and how socio-political institutions are shaped.

Moreover, the work on colonial settlement structures and associated institutional legacies has also already been mentioned above. This work observed that European colonial powers built different colonial-administrative institutions in the occupied territories (Acemoglu et al 2001). These have differed depending on whether the absence or presence of tropical diseases encouraged more or fewer settlers to stay. Where European settlers stayed, they built institutions that encouraged investment more generally. For

example, these included the types of land and mineral rights that settlers already knew from their mother countries.⁴⁶ Where settlers did not stay, the institutional arrangements that they developed merely served the purpose of extracting and transferring natural resources to the mother country.

A third strand has focused on social cohesion and social conflicts, proposing that particular socio-political and/or socio-economic constellations may underpin good versus bad institutions (Bulte et al 2004). The argument goes that where narrow elites capture resource rents, they collectively support the maintenance of institutional arrangements that protect their interests, which then reflects the way public policies are shaped. For example, Perälä (2003) and Hodler (2004) confirmed interaction effects between resource dependence and, respectively, social cohesion and ethnic fractionalisation. This work overlaps with that which has focused on point source resources characteristics, but the extended hypothesis is that these types of resources in combination with low social cohesion pose a greater structural risk for public policies to be captured by narrow elites.

Easterly et al (2006) explore further whether social cohesion can explain variance in institutional quality. Their argument is that socially cohesive societies generate greater confidence and trust between governments and citizens. These are necessary to overcome the short-term losses versus medium-term gains that inevitably come with the reforms and changes in policies that are necessary to move a country up the ladder of growth-enhancing institutional arrangements. While these proponents recognise that the origins of social cohesion are complex, and that lack of social cohesion may be tied to a country's historical legacy, they are also confident that it should be possible to purposefully build institutional arrangements in a way that supports more cohesive societies and unifies fractionalised peoples. However, they point to a critical role for the

⁴⁶ See chapters 6 and 7 for a more detailed discussion of these historical trajectories and legacies.

state and public policies to break down existing social barriers in order to give more equitable access to economic and social opportunities.

This proposition points towards a fourth strand of the structural institutional literature, which emphasises more explicitly the type of state that producer countries exhibit. One argument is that producer countries are more likely to be ‘predatory states’ rather than ‘developmental states’ (Auty and Gelb 2001). At the heart of this argument lies, again, the relationship between ruling elites, the state and society at large where structural factors are thought to condition whether a country ends up with one or the other form of state. Conditioning factors include, for example, the types of resources found and the size of a country, its population density etc. In a next step, these stylised state models have been further associated with two stylised political-economic models that attempt to explain why producer countries struggle to achieve more diversified economies. These models are discussed further in section 2.3.

In summary, in contrast to rational choice institutionalism, the proponents of structural institutional analyses have been less ambitious in drawing conclusions to inform forward-looking policy interventions to deliver positive results. Their explanations for variance in outcomes across producer countries have tended to look back and reflect. Whether tropical diseases prevail, what types of resources a country is endowed with, the number of socially distinguishable ethnicities that live in a particular territory, or the historical fate and/or colonial history a country has experienced, are not variables that advocacy groups or international development practitioners can easily influence. Thus, the explanations for both poor and relatively good outcomes put forth by the proponents of structural institutional analyses have not readily supported the position that sector reforms provide a panacea to address ‘bad’ institutions and/or ‘bad’ governance.

2.2.4 *Policy conclusions*

This section has summarised the debate on the political economy of extractive resources, which moved on from the work summarised in section 2.1 to gain a better understanding why many producer countries have experienced negative economic, political and social outcomes. There are three observations.

First, most of this literature has focused on resource dependence. This has introduced an inherent bias towards countries that are exporters of extractive resources and against countries that consume at least part of their production of extractive resources to produce other goods and/or services. This suggests that when countries and their extractive resources sectors are compared, greater attention ought to be paid to the details of a country's idiosyncratic conditions.

Second, there are mixed results for all three types of outcomes. Although the popular debate has often portrayed 'resource curse' as if it were an undisputable fact, several country case and comparative studies have suggested a more differentiated picture. There is also a mixed picture as to how different explanatory and dependent variables interrelate and overlap. This points to complex relationships between structural conditions, purposefully designed institutional arrangements, and agency-driven policy interventions. Testing the empirical validity of overtly simplistic and generic explanations may be convenient and legitimate for the production of academic publications, but it would seem a poor basis for the formulation of pragmatic policies aimed at achieving positive public objectives.

Third, in trying to explain poor outcomes, one of the two main schools of thought has stressed *rent seeking* as the rational behaviour of individuals that leads to poor aggregate outcomes. The other school has emphasised rentier states and/or societies where

particular structural conditions have been identified to underlie poor, but sometimes also good outcomes. Both schools have found a middle ground in pointing towards ‘good institutions’ as the variable that can explain variance in outcomes across producer countries. Many proponents and consumers of research outputs have rather uncritically equated institutions with ‘good governance’.

Structural analysts have generally been satisfied with pointing to differences in institutions to explain variance in outcomes. As they are more cognisant of country-specific idiosyncratic conditions, they have generally taken a more cautious, if not also a more pessimistic, stance towards suggesting that institutional arrangements can be changed relatively easily. They deploy institutional analyses to explain the status quo, and only from there may embark on conjecturing the leverage of particular actors to influence institutional change going forward. In turn, proponents of *rent seeking* explanations have been more forthright in suggesting that good governance could be both a prophylaxis and a cure. They have invariably assumed that positive institutional change is possible and can be proactively encouraged, although they view the assumed incentives of politicians and bureaucrats as problematic. In other words, proponents of *rent seeking* explanations have not hesitated to take the *short cut route* from Quadrant 1 to Quadrant 4 to proactively encourage institutional reforms. In turn, proponents of structural institutional explanations have been implied that the longer route to Quadrant 4, via Quadrant 2 and Quadrant 3, may be the more sustainable path.

In essence, it is the proponents of *rent seeking* explanations who have corroborated the influential high-level hypothesis that international initiatives targeted at improving transparency in the extractive resources sectors will result in better sector governance and ultimately better economic, political and social outcomes. Transparency has been associated with the expectation that this will improve accountability and ultimately lead

to positive institutional change. The suggestion is that better checks on politicians, bureaucrats and resource developers will support better outcomes.

A landmark event supporting this policy conclusion was the World Bank's independent Extractive Industry Review (EIR), prompted by pressure from advocacy groups and completed in 2004. Against the background of 'resource curse' fears, it recommended that the World Bank should no longer invest in extractive industry projects unless producer countries could prove that they had 'good governance' in place. The management response by the Board of the World Bank moderated the EIR's recommendation. It argued that, because the organisation could contribute to improving sector governance and also influence industry standards, its continued involvement would still be positive even where producer countries' good governance was lagging at the onset. It was, not least, this response that has prompted the need to identify in more concrete terms what the international development community could do to improve the governance of the extractive resources sectors. It implied that international initiatives and development organisations could contribute to the 'good governance' of the extractive resources sectors by means of setting 'conditionalities' that producer countries, by way of financial coercion or normative suasion, would be expected to meet.

Several international initiatives and donor activities have since been established with the mission to help, or pressure, producer countries to improve sector governance. A few examples include: the Extractive Industry Transparency Initiative (EITI); the Revenue Watch Institute (RWI); and the Natural Resources Charter (NRC). But several others also exist. Funding for these initiatives has come from private and also from public sources, including bilateral and international development aid. Not everyone has agreed that these initiatives are sufficient to bring about positive outcomes. At the same time, the additional enabling conditions have also not yet been made very clear. Nor are there

many calls for actions beyond improving transparency.

A second policy conclusion has been to further support technical reforms aimed at improving particular aspects of the extractive resources sectors. In the absence of better ideas, the more successful producer countries, for example Norway, Botswana, and Chile, have often served as the reference benchmark. However, although they provide convenient reference points, not everybody has bought into the straightforwardness of such ‘best practice’ examples (Dietsche 2007, Kolstad and Wiig 2009, Kolstad et al 2009, Thurber et al 2010).

Together, both sets of policy conclusions make for the striking observation that they have honed in almost exclusively on the governance of the sector. It is only more recently that this overtly narrow perspective has been improved with the introduction of the notion that the benefits of extractive industry projects develop along a ‘value chain’. Still, relatively little attention has been paid towards how sector-focused interventions achieving specific sector-targeted objectives may or may not improve the wider institutional arrangements within which cross-sector public policies are formulated, implemented and to a greater or lesser extent funded with revenues generated by the extractive resources sectors. The debate summarised in the next section touches on this question.

2.3 Debate No 3 - Linking the resources sectors with other economic sectors

Following Debate No 1 on investing in the extractive resources sectors and Debate No 2 on the political economy of extractive resources, this section discusses Debate No 3 on building linkages between the resources sectors and other economic sectors. This debate expects that building such linkages will support economic diversification and provide broader access to economic opportunities, not least because capita-intensive extractives projects generate relatively few direct employment opportunities.

Debate No 3 brings together two challenges that were also recognised by Debate No 1 and Debate No 2. First, this debate shares with the macroeconomic debate the concern that positive outcomes hinge on whether investments in the extractive resources sectors contribute to improving the host country's overall productive capacities. Second, it also shares the concerns raised by the proponents of structural institutional analyses that idiosyncratic country conditions and institutional path dependencies matter for how countries move from an existing institutional *status quo* towards new arrangements.

This section covers this debate in three parts. Sub-section 2.3.1 outlines the recently revived discussion on linkage theory. Sub-section 2.3.2 puts this discussion in the context of proponents reconsidering industrial policy as a suitable means to support economic diversification. Sub-section 2.3.3 contrasts these two sub-discussions with the more narrow focus on increasing local content and employment. This focus tends to dominate the relationship between resource developers and producer country governments.

2.3.1 *Linkage theory*

As part of Debate No 1, section 2.1 mentioned a fourth macroeconomic challenge that warrants further attention: this is the challenge of diversifying an economy away from specialising on an export-driven extractive resources sector by building linkages between this and other economic sectors.

Structural economists started to focus on this challenge in the first part of the 20th century, because they feared that primary commodity exporters would ultimately suffer from declining terms of trade. They saw that although such countries might initially be exploiting their comparative advantage, over time such specialisation would hold back their further economic and social development. Observers were especially concerned about the enclave characteristics of capital-intensive extractive projects. They developed

linkage theory to explain under what conditions these characteristics are likely to prevail, and when and how they could potentially be overcome.

2.3.1.1 *Origins*

The origins of linkage theory are credited to economic historians looking at Canada and the United States to analyse how these countries' initial commodity trade did, or did not, support the development of other domestic and export-oriented industries (Auty 2001a, Findlay and Lundahl 2001, Morris et al 2012). For example, Innes (1920) argued that Canada's fur trade supported the development of infrastructure, which further supported the expansion of other export-oriented commodity trades, such as wood and minerals.⁴⁷ North looked at the impact of cotton production in the Southern US states on other economic activities expanding in the Northern states, because these states could deliver products, for example meat and wheat, which the Southern states needed but did not produce enough themselves (North et al. 1966). These in-depth case studies provided the basis for the conceptual framework that Albert Hirschman developed in the 1970s, where he set out three types of linkages: *production*, *fiscal* and *demand linkages*.

Hirschman (1977) distinguished between two types of *production linkages*. *Backward linkages* involve the production and provision of goods and services required for the production of the export resource. Secondly, *forward linkages* require the production of resources as a stimulus or an input. For example, they include the processing of raw materials into other manufactured goods, such as from iron ore to steel-based goods, or from energy resources to energy-intensively manufactured goods. *Fiscal linkages* arise from resource revenue funding public investments, for example in railways and other transport infrastructure. Finally, *demand linkages* are sometimes also called *consumption linkages* and they arise from the economic activities created by the local spending of

⁴⁷ Watkins (1963) and others later built on Innes' original work.

income earned by those directly employed by the export-oriented resources sectors. Demand linkages include so-called multiplier effects, whereby the demand created by those spending their income earned in the resources sectors on locally produced goods and services creates further positive demand effects by those who benefited from this first round of spending.

Overall, Hirschman was pessimistic about the prospects of export-oriented producer countries benefiting from these various linkages. He predicted that fiscal linkages would be limited, because raising taxes on the basis of the resources sectors would not automatically direct public expenditure towards implementing policies and conditions that would support further productive activities. Demand linkages would also be limited, because the needs of those directly employed by the resources sectors could potentially be met with imports from abroad. Finally, Hirschman thought that production linkages held the most promising potential to support economic diversification. In particular, he looked favourably at backward linkages, because he thought that these would be least 'technologically strange'. In other words, supply industries were thought to apply technologies that would be most closely related to the modes of production applied by the resources sectors themselves.

2.3.1.2 Applications

There are two ways in which linkage theory has been applied. Baldwin's closer look at the Southern United States demonstrates one of these (Baldwin 1956). Stressing the capital-intensive technology used in cotton production, he described the typical characteristics of economic enclaves that provide limited stimulus for other market-based economic activities to develop. He found that few inter-sector linkages were built within the regions where such technology was used. Demand linkages were undermined, because the abundant supply of cheap labour and a severely skewed distribution of

income provided no stimulus for the production of locally marketed goods and services. This labour either worked for cash income, barely sufficient to survive, or alternatively, survived on subsistence farming. Fiscal linkages were limited, because little tax was paid and that which was paid was not deployed to provide broad-based public goods and services. Backward and forward linkages were also constrained, because capital-intensive production inputs were imported and the resources produced were exported. Using the terminology of structural economics, this economy was one based on exploiting point source resources for an elite group of beneficiaries.

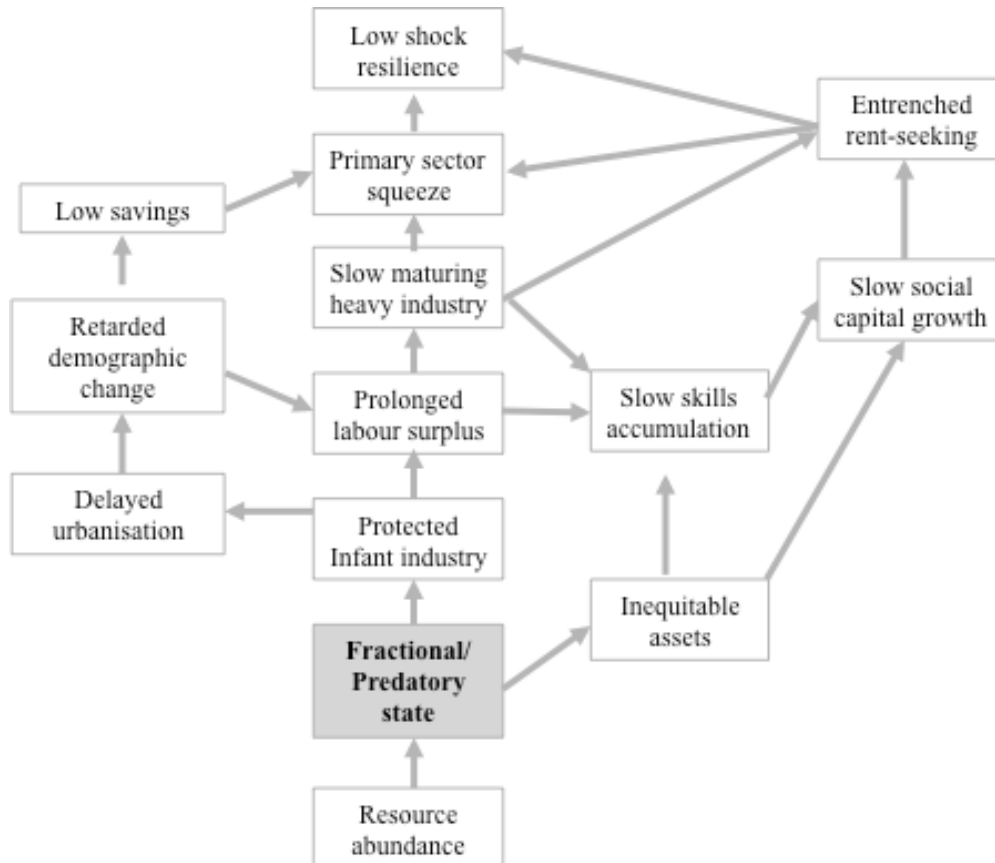
The second type of application has combined exogenously given technologies of production with domestic socio-political factors to explain variance in outcomes across producer countries that apply similar production technologies.⁴⁸ Auty suggested this approach in his book *Resource Abundance and Economic Development* (2001), where he introduced the notion of ‘social capital’ as this moderating factor. In an attempt to unpick this variable, Auty and Gelb (2001) developed the two juxtaposing political-economic models briefly mentioned in sub-section 2.2 as one of several strands of structural institutional explanations for variance in outcomes. They honed in on the role that different types of states would play in supporting inter-sector linkages. Their positive *competitive industrialisation model* is supported by a ‘development state’⁴⁹ that complements a virtuous economic cycle with a cumulatively virtuous social cycle. In turn, the *staple trap model* is associated with an initially skewed distribution of assets and income that locks economies into a trap that hinders economic diversification, reduces competitiveness, and holds back social development.

⁴⁸ This extension of linkage theory draws inspiration from Arthur Lewis’ analysis of the social foundation of plantation economies, where he argued that it is not only the technology of production but also the structure of society that constrains economic and social development.

⁴⁹ Chapter 5 will come back to the role of the ‘developmental state’ in relation to institutions and institutional change.

The *staple trap model* is shown in Figure 5. It suggests that producer countries are somehow more likely to start off with a fractional or predatory state, as opposed to a developmental state.

Figure 5: The Staple Trap Model



Source: Auty and Gelb (2001).

With hindsight it is obvious that this application provided but a start to using linkage theory to understand the dynamics between production technologies and the development of social capital as a high-level descriptor for ‘good institutions’. However, it is nevertheless quite remarkable that the bulk of the literature on the governance of the extractive resources sectors produced since the 1980s has paid little attention to the actual and potential economic linkages between the export-oriented resources and other economic sectors. Beyond Auty’s enhanced linkage theory, there has been little

theoretical and empirical work advancing the Hirschman framework.

One could speculate about the reasons for this limited uptake of Auty's work. One plausible reason could be that, at the time, this work was still too closely associated with the structural economic arguments of the 1960s and 1970s that supported the failed state-led development model. Another potential reason could have been that the deliberations on the variable 'social capital' and the associated policy recommendations were, in Auty's own words, 'rudimentary'.⁵⁰ This variable did not lend itself to be deployed in the same neat fashion as the proxies for institutional quality that proponents have subsequently used to test interaction effects with proxies measuring resource dependence. However, it is somewhat surprising that Auty's did not prompt others to draw a link with the wider social science debate on the role of institutions in development.

2.3.1.3 Recent developments

More recently, there has been a rediscovery of linkage theory. One example is UNECA's report on *Minerals and Africa's Development* (2011) exploring how producer countries could better integrate the extractive resources sectors with other economic sectors in order to achieve broad-based economic and social development. This report expands on Hirschman's four production linkages by distinguishing between four types of such linkages: *upstream*, *downstream*, *side stream* and *lateral migration linkages*. It argues that this expansion is based on insights gained from cluster and supply chain analyses.

With reference to Hirschman's original framework *upstream* match *backward* and *downstream* match *forward linkages*. In turn, *side stream linkages* recognise that extractive projects require several auxiliary business services, such as the provision of utilities, logistical services, communication and financial services, and skills and

⁵⁰ See Auty (2001), page 11.

technology developments. Furthermore, these services are transferable within and across sectors. The argument is that because of their scale, extractive projects can potentially create the critical mass of demand required to put the supply of such services on a basis that can support further *upstream* and *downstream linkages* and, via *side-stream linkages*, also serve other sectors more generally.

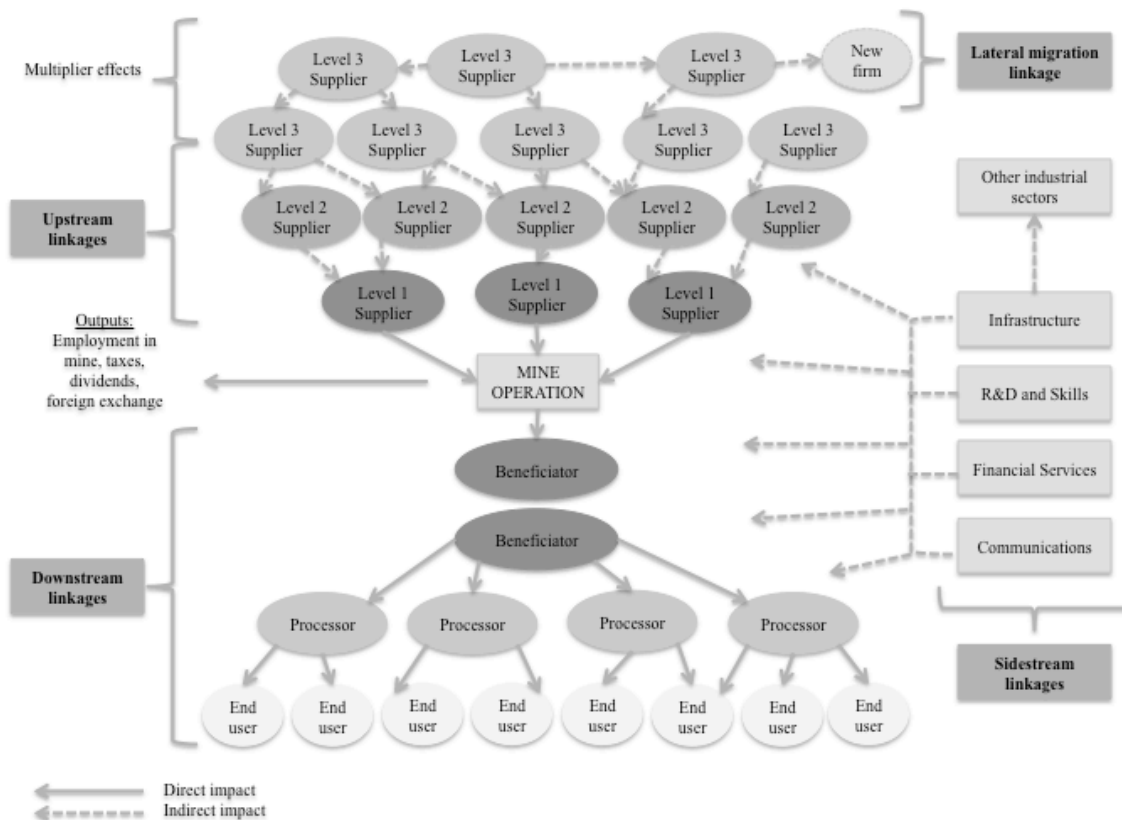
Lateral migration linkages capture the dynamic of producer countries moving up the industrial ladder, but only once it becomes possible to embrace more technology and knowledge-intensive production techniques, such as more sophisticated process control and materials handling. Such linkages are expected to emerge in the more advanced stages of industrial development, because they require investments in more advanced and specialist technical skills and research and development.

Figure 6 presents UNECA's visualisation of these four linkages. Notably, the first tiers of backward and forward linkages, respectively, are considered direct linkages. Beyond that level, and also with respect to the side-stream and lateral dimensions, linkages are thought of as indirect and induced. UNECA framework has yet to be applied more widely to particular country context to trace actual linkages built, and to identify the opportunities that could be seized and the constraints that would need to be tackled to build them.

The second example of rediscovered linkage theory is recent comparative research that set out to investigate empirically how the current commodity boom might, or might not, be supporting industrialisation and economic diversification in Sub-Saharan Africa (UNIDO 2012, Morris et al 2012). This research has also drawn inspiration from supply chain analyses to compare eight countries with either substantial mining, oil or forestry sectors, to assess the breadth and depth of *backward, forward and horizontal linkages*. The focus on backward and forward linkages is derived from Hirschman's framework,

while the expanded dimension of *horizontal linkages* refer to suppliers and users in the supply chain that develop capabilities, which also feed into other industrial and service chains. Thus, horizontal linkages are similar to UNECA's side stream linkages.⁵¹ Like UNECA, these researchers also put some hope into the development of these linkages, as opposed to Hirschman's bet on backward linkages.

Figure 6: UNECA's perspective on linkages



Source: UNECA (2011), p. 103.

This comparative research starts with the observation that the conventional view is very pessimistic about export-oriented resources sectors supporting inter-sector linkages. They see a risk that this negative expectation misses to recognise the opportunities for producer countries that the global commodity boom could hold. They stress that the industry has

⁵¹ The study further differentiates forward linkages whether commodities are processed, or whether they are converted into an entirely different product, generally in an unrelated manufacturing activity. This is referred to as beneficiation. For ease of simplicity, these details are ignored here.

changed since the 1970s and that corporate strategies have moved away from taking enclave production for granted.

Detailed country case studies were first compiled to document the empirical evidence for each of the three linkages across the eight cases. These results were then compared and contrasted to identify whether there are common factors explaining the greater depth and greater breadth of the linkages that some of these eight countries have achieved. The scale of the demand and the technological strangeness of the production processes applied by the resources sectors are identified as key factors that matter for the depth of the production linkages achieved. Several contextual factors are also extrapolated. In the view of these researchers, they exemplify Hirschman's description of a dynamic process of *'one thing leading to another'*. These factors include (i) the level of skills available, in particular with respect to engineering and technical skills; (ii) ownership structures and firm strategies; (iii) the nature and quality of the existing physical and administrative infrastructure; and (iv) the overall efficacy of the policy environment, meaning the level of coordination and collaboration that exists between the public and corporate sector.

The authors conclude that these factors reflect three levels of industrial policy. At the macro-level, industrial policy provides supportive macroeconomic policies. These are a necessary but not a sufficient condition for positive linkage building. At the meso-level, the authors identify selective policies promoting key sectors and regions and helping industrial clusters to emerge. These support inter-firm externalities and learning, and correct potential market failures. At the micro-level, the authors recognise specific measures addressing firm-level challenges, such as skills and knowledge deficits and the adoption of new process technologies and business models. Finally, coordinated collaboration actions between and within the corporate and the public sector run across all three levels. These include clear visions and internal and external strategies, as well as

appropriate forums where information can be shared and collaborative actions can emerge.

In summary, the debate on linkage theory has moved from the initial focus on technologies of production to Auty's expansion of the Hirschman framework introducing a social capital dimension to describe the structural challenges associated with point source resources. More recent applications have challenged the more pessimistic perspective of the past, suggesting that there might be new opportunities associated with the global upturn in the demand and the prices for commodities. Recognising that the industry and corporate strategies have changed, these applications have expanded the Hirschman framework to suggest that horizontal/side stream linkages may provide yet unrecognised opportunities for economic diversification. Finally, the more recent applications are more cognisant of the social foundations and institutions supporting linkage building. This last observation arises from the literature on industrial policy, which is the focus of the next sub-section.

2.3.2 Industrial policy

Standard economic theory has suggested that countries should specialise in sectors where they have a competitive advantage. Thus, if they are well endowed with natural resources they should specialise in producing these. However, its critics contain that development is not about specialisation (Rodrik 2007, Mkandawire 2012). Countries that have developed have diversified over most of their development path. They have in fact become less specialised and more diversified as they got richer (Imbs and Wacziarg 2003). It is only at the higher income levels that countries again become more specialised and focus on particular sectors. The question is, therefore, why some countries have found it easier than others to diversify away from exporting primary products.

2.3.2.1 Market failure versus the risk of state failure

Proponents of industry policy suggest that states can nudge the private sector when market failures are deterring entrepreneurs to diversify. The conventional approach has been for states to identify potential market failures and then to intervene to correct these. This approach has been tried in the 1960s and 1970s, with limited success and the consequence that industrial policy has generally been looked at unfavourably. Critics have identified state failure as the risk that comes with correcting market failures: policy interventions create rents that politicians, bureaucrats and industrialists seek to capture without delivering the expected economic and social benefits. The affinity with the rent-seeking school of thought summarised in section 2.2 is obvious. It had drawn its inspiration from the earlier assessment of the failures of applied industrial policy.⁵²

2.3.2.2 Comparative institutional advantages

With the advancement and the review of the achievements of institutional analyses, industrial policy has received renewed and favourable attention. This is based on the recognition that not only nature shapes comparative advantages, but so do institutions. This proposition is supported by analyses that have traced the specific characteristics of advanced industrialised countries to their particular institutional arrangements and how these have evolved over time as an outcome of political-economic processes.

A seminal contribution is the literature on ‘Varieties of Capitalism’, which introduced the concept of comparative institutional advantages to compare the varied economic structures of similarly successful OECD countries.⁵³ Several empirical studies on the economic successes of several East Asian countries have put such advantages down to strategic state interventions supporting private enterprises to pursue particular economic

⁵² For a comprehensive review of this literature see Congleton et al. (2008).

⁵³ This literature includes, amongst others, Williamson (1985), Steinmo, Thelen and Longstreth (1992), Hall and Soskice (2001), Ostrom (2005), Eichengreen (2007).

activities.⁵⁴ Furthermore, endogenous growth theories, stressing that technological progress and labour productivity increases are driven by positive externalities created within countries, also mirror the thinking that there is something about a country's overall coherence of policies and institutional arrangements that underpins its economic performance.

2.3.2.3 *Critical functions*

Those with favourable views on industrial policy do not believe that there is a match between successful industrial policy and normative views on what good institutions are. Rodrik (2007) suggests that successful industrial policy delivers two critical functions. The first is to elicit information from the private sector on significant negative externalities that impede entrepreneurship. This is about discovering the true cost structure of an economy in order to remove impediments to doing business. The second function is to support collaboration between the private sector and the public sector for the joint identification of challenges and opportunities. Collective action is often required to address structural constraints that hold back economic transformations. For example, it may require the simultaneous expansion of upstream and downstream activities to incentivise large-scale investments with high fixed costs, such as expanding the provision of utilities or transport infrastructure. Unless the private sector is already highly organised, the state can play a critical role in aligning multiple positive investment decisions.

Rather than proposing a set of prescriptive policy interventions, Rodrik sees industrial policy as a discovery process, “...*where firms and the government learn about underlying costs and opportunities and engage in strategic coordination*” (2007, p. 101). It is

⁵⁴ The respective literature includes, amongst others, Haggard (2004), Khan (2000, 2002), Chang (2007) and Lin (2012). Some of these authors have traced the capabilities associated with such interventions to an institutional legacy of more direct colonial rule, as opposed to the indirect colonial rule exercised elsewhere. See Lange (2005) for a fuller discussion.

through working together that both parties can overcome their mutual information deficits and learn about the challenges and opportunities each side is facing. He sees this approach differing from the earlier use of industrial policy, which emphasised specific strategic sectors and related outcomes. He also sees macroeconomic stability as a prerequisite but not a sufficient condition to support economic diversification. Industrial policy in turn should support a range of new activities with the view to resolve information and coordination constraints. Rather than seeking to pick winners, industrial policy should be conducted in a way that recognises which new activities deliver, and abandon those that do not.

It is well recognised that there remains the risk that industrial policy can be abused by rent-seeking entrepreneurs and corrupt officials. Supporters argue, however, that the inherent information deficits of the public sector cannot be addressed by keeping bureaucrats totally distant from businesses. Instead, industrial policy has to be embedded within a network of linkages between public and private sector representatives, where processes guide information flows and joined learning. At the same time, it would be important to ensure that the public sector remains independent of the private sector and focuses on the provision of public goods that benefit a broad-based private sector, as opposed to one dominated by a narrow and exclusive economic elite.

There is obviously common ground between the functions of industrial policy that Rodrik has emphasised and the findings of the comparative research on the impact of the commodity boom on industrial development in Sub-Saharan Africa. Both stress systematic information sharing and coordinated actions. A similar story also transpires from the in-depth analyses that have reviewed the positive experiences of Norway and other countries applying industrial policy in relation to the extractive resources sectors. According to Noreng (2004), Norway used industrial policy from the 1970s to encourage

partnerships between foreign and domestic companies to collaboratively build internationally competitive Norwegian companies. Detailed descriptions of Norway's approach have lent themselves to be copied in part by other countries. However, insiders argue that there is more to the country's success than the individual steps taken, including a clear and cohesive policy consensus on the functions policy interventions were meant to achieve (Heum 2008). This differs, for example, from the British experience where industrial policy was also tried, but the overriding government objective was to develop the North Sea reserves with maximum speed (Smith 2009).⁵⁵

2.3.3 Local content and employment

The debate within the extractive resources sectors is biased towards backward linkages, evolving around the contentious issue of local content as well as local employment. This issue has often been defined in terms of the percentage of procurement and the percentage of employees that resource producers source from within the host country. Mandatory regulatory requirements, backed by a local content policy that states the broad objectives and principles, are seen as the core instrument for achieving an increasing greater share of local content and local employment (Tordo et al 2013).

For resource developers this discussion often boils down to a negative question: what extra costs are mandated to be absorbed to ensure compliance? In the worst case, such requirements can be seen as a form of quasi taxation delivered by the procurement and the human resources departments. This focus is quite removed from the broader linkages and industrial policy debate emphasising information sharing and collaboration.

A major constraint for broadening out the local content and employment debate is a lack

⁵⁵ This article compares the British experience with that of Norway and France. For a full review of the UK's oil and gas policies, see Kemp (2012). He observes the widely swinging policies the UK government has applied to its oil and gas sectors with the undertone that for other countries there is much to learn to avoid.

of information and data to guide better policies. This is both a conceptual problem and a problem of systematic data collection. Despite the wealth of high-level work on the positive and negative impacts on producer countries, very little empirical work has been conducted to document actual firm and industrial capacities in producer countries to provide a sound evidence base for learning about constraints and to develop targeted policy interventions.⁵⁶ Few efforts have attempted to connect sector activities with actual and potential industrial capabilities.

As the extractive industries are structured at the global level, economic geographers have argued that global network analyses should be applied to understand the interconnections between international resource developers and their supply chains. For the oil sector, Bridge (2008) has documented the different types of firms engaged in this chain, the organisational restructuring that has happened since the 1990s, and the increasing complexity and diversity of the interactions due to unbundling, outsourcing and organisational rationalisation. He also recognises that their need to gain and retain access to extractive resources puts resource developers in a relationship with local constituencies where access and rights to resources is traded against delivering benefits. Drawing the circle from linkage theory to industrial policy and local content obligations, this observation also suggests that it is time to move beyond the narrow local content debate. A wider conceptual framework explicating several types of potential linkages would be more appropriate for collaboratively identifying opportunities for delivering benefits.

2.4 Comparison and open questions

Chapter 2 has reviewed the three main debates on the governance of the extractive resources sectors. Debate No 1 has focused on seizing the opportunities associated with investing in these sectors. Its policy conclusions underlined the positive impact of foreign

⁵⁶ Klueh et al (2007) observe this for Sao Tome and Principe.

investment. However, it also recognised that a foreign-funded and export-oriented industry could pose some additional macroeconomic challenges, as well as project level social impacts that need to be assessed and managed.

Debate No 2 has stressed the political economic implications of countries depending on the extractive resources sector. Several strands of explanations have linked the extractive resources sectors to negative economic, political and social outcomes. Variance in outcomes across producer countries has prompted the two main schools of thought to come together and identify the ‘quality of institutions’ as the critical condition explaining this variance. Many have equated the ‘quality of institutions’ with the ‘good governance’ of the sector. The overriding policy conclusion has been that making the sector more transparent will at least in part satisfy this condition.

Debate No 3 has focused on linkages between the resources and other economic sectors. The expectation is that building such linkages will broaden economic opportunities and therefore support development. With respect to the relationship between resource developers and the governments of producer countries, this debate often revolves around setting and complying with mandatory local content and local employment targets. However, there is also a wider discussion emerging. It builds on the revival of industrial policy and linkage theory and draws on insights from wider supply and value chain analyses. There are overlaps between this discussion, the views of some of the proponents of structural institutional analyses, and the high-level insights of endogenous growth theories.

Reaching across all three debates and reflecting the complexity and poor conceptualisation of ‘governance’ as a synonym for ‘good institutions’, there are four open questions that merit closer scrutiny. These are: (1) *what actually are institutions*; (2)

how do institutions change; (3) how are institutions enforced; and (4) do existing institutions matter for the design of interventions aimed at improving institutions.

Figure 7 presents each of these four questions in one of the quadrants of the conceptual framework that was introduced in Figure 1 of Chapter 1 and expanded in Figure 4 of sub-section 2.2.3.

Figure 7: Key questions for the governance of the extractive resources sectors

	Results	Processes
Rules	Quadrant 1 – <i>What actually are institutions?</i>	Quadrant 2 – <i>How do institutions change?</i>
Steering	Quadrant 4 – <i>Do existing institutions matter for the design of interventions aimed at improving institutions?</i>	Quadrant 3 – <i>How are institutions enforced?</i>

Source: author's figure

To recall, Figure 1 presented in a matrix four different uses to which the governance concept has been put, where each use reflected a pair combination of whether researchers have focused on **results**, **rules**, **processes** or **steering**. Figure 4 then set out the four key questions that these four uses have posed in relation to institutional analyses. For Quadrant 1, the question posed in Figure 4 *how do institutions affect outcomes* has now become *what actually are institutions*. For Quadrant 2, the question *how do multiple actors influence processes to create new or change existing institutions* has turned into *how do institutions change*. For Quadrant 3, the question *how do processes influence the enforcement of public policies* has become *how are institutions enforced*. And finally, for Quadrant 4, the question *how to intervene to achieve desired outcomes* has been changed

to *do existing institutions matter for the design of interventions aimed at improving institutions*.

In relation to Figure 4, the thesis argued the following: the intention to intervene in order to improve the economic, political and social outcomes associated with the extractive resources sectors has prompted proponents to pursue on a *short cut route* from Quadrant 1 to Quadrant 4. Actions aimed at improving results by improving institutions have been guided by insights drawn from cross-country comparative analyses. The underlying assumption of this *short cut route* has been that it is possible to look at institutions as a matter of technical design, where generic applications across different country contexts are possible.

The questions raised in Figure 7 challenge this assumption, and therefore also the suggested *short cut route*. If there are doubts about what institutions actually are and whether those that already exist make a difference to how interventions to improve institutions can be designed, the route to get from ‘*how rules affect results*’ (Quadrant 1, Figure 1) to ‘*how to steer towards desired results*’ (Quadrant 4, Figure 1) is more complex. The alternative, *longer route* gets from Quadrant 1 to Quadrant 4 via Quadrant 2 and Quadrant 3. As they did in Figure 1, the arrows in Figure 7 indicate the two different routes.

The next four chapters of this thesis will focus on each of the questions set out in Figure 7. These four chapters will lay out the substance needed to answer the three main research questions posed in Chapter 1.

Quadrant 1 probes into the remarkable lack of clarity that proponents of political economic explanations have left about what institutions actually are. While these proponents have pointed to ‘good institutions’ as the cure and prophylaxis for producer

countries, section 2.2 showed that a variety of proxies have served to measure all sorts of things, including the absence of corruption, rule of law, electoral competitions, the level of transparency in the sector, and so forth. At the other end of the spectrum, those who have engaged in this debate at a more structural level have referred to all-encompassing institutional legacies, political systems, or social capital and cohesiveness. These proponents have stressed functions, such as coordinating economic agents by reducing transaction costs, levelling information asymmetries, and enabling entrepreneurs to turn uncertainties into calculable risks. Notably, these functions overlap with the arguments put forth by the proponents of industrial policy and linkage theory. The challenge has been that there is not always a direct and unambiguous way of connecting the functions that institutions provide with the proxies that have been used to measure their apparent quality.

With the objective to bring some clarity to this conceptual muddle, Chapter 3 will detangle the different levels of social analyses that have been applied across all three debates and will lay open the types of research methods that proponents have used to associate institutions with outcomes. This chapter will critique the causal connection that has been drawn between rules and results where the quality of institutions has served as an input to explain outcomes.

The question set out in Quadrant 2 of Figure 7 recognises that knowing that institutions are important is not the same as understanding how institutions change, what drives institutional change in the right direction, and why some countries are struggling to move away from ‘bad’ institutions. Statistical analyses, instrumenting governance indicators as institutional constraints that keep rent-seeking behaviour in check, have paid little attention to the question how the good institutions that are presumed to exist in the better performing countries have come about. Meanwhile, proponents of structural explanations

have pointed to historical trajectories and path dependencies shaping institutions that are, by definition, hard-wired. Therefore, these types of institutions would not be amenable to easy change, nor would they be considered easy to copy.

Chapter 4 will review the social science literature on institutional change to bring out insights relevant for those interested in supporting positive institutional change in producer countries. This chapter will explore how policy processes influence institutions as an outcome.

The question set out in Quadrant 3 of Figure 7 is prompted by the observations that the political economic debate on sector governance is biased towards improving institutions that check on politicians and bureaucrats to ensure that they do not abuse their power to the detriment of achieving broad-based socio-political objectives. This debate has made little effort to understand where that power comes from in the first place, and therefore what the conditions within specific countries are to steer interdependent policy processes towards the development of institutional arrangements that are expected to lead to better outcomes.

To identify where power comes from, it is not sufficient to compare how countries have performed. It also requires looking at how they are able to steer processes towards achieving positive results. Thus, Chapter 5 moves on to Quadrant 3 of Figure 7 to review the literature on state capacity and developmental states to better understand how institutions are enforced.

The question set out in Quadrant 4 of Figure 7 is prompted by structural explanations emphasising institutional legacies and path dependencies. These explanations come across as rather deterministic, leaving little opportunity for change. In contrast,

proponents of rent-seeking explanations underplay the potential contingent relevance of legacies and path dependencies and institutional reform programmes often ignore these.

Chapter 6 will provide an overview of the diversity and geographic patterns of sector legal frameworks, because this set of sector institutions has often been the target of institutional reforms. The conjecture is that the question how to intervene should be answered against the background of awareness how existing sector legal frameworks have come about. Although the content of Chapter 6 does not fit quite as neatly in Quadrant 4 as the contents of the other three quadrants do, awareness of the institutional legacies and path dependencies underpinning the existing diversity and geographic patterns in relation to sector legal frameworks would appear to be useful for framing efforts aimed at steering sector governance reforms towards achieving desired outcomes. However, externally imposed institutional reforms have rarely explicated the potential boundary conditions associated with legacies and path dependencies.

3. What are institutions?

As the quality of institutions has been identified as the factor that explains variance in outcomes across producer countries, it warrants asking the seemingly simple question: *what are institutions?* This chapter discusses this question by setting out the four levels of social science analyses that are reflected in the literature reviewed in Chapter 2. Each of these levels assigns institutions a different role and thus, they imply different definitions. Next, the chapter lies open the three main research methodologies that proponents have applied to investigating the causal connections between the extractive resources sectors, institutions and outcomes. When the four levels of social science analyses are contrasted against the application of the three types of methodologies, it can be recognised that proponents' choice of methodology is grounded in their choice of ontology (Levi-Faur 2006). This recognition helps to lay open why one type of methodology has proven to be more successful in providing the empirical evidence that has supported the global agenda on the 'good governance' of the extractive resources sectors. However, the limitations of this choice of ontology can also be recognised.

3.1 Levels of social analyses

The literature on the opportunities and challenges for producer countries has been pitched at different conceptual levels. The role assigned to institutions, as the mediating factor between the presence of extractive resources sectors and outcomes, has depended on the ontological premises from which proponents have embarked to conduct their analyses.

Oliver E. Williamson's 2000 review of the achievements of 'New Institutional Economics' provides a useful reference point to lay open these levels and to compare what definitions each of these has implied respective what institutions actually are. Williamson took stock of the progress social scientists, more generally, but economists in

particular, have made on the study of institutions. Throughout the last quarter of the 20th century institutional economics had been one of the liveliest areas of research in the field of economics. This research built on the recognition that markets do not just exist, as neoclassical economists had assumed, but that they are underpinned by institutions, which in turn are shaped by social networks and organisation. Williamson found that the quest to better understand institutions had resulted in “*a boiling cauldron of ideas*” (Williamson 2000b, p. 610), where many institutional research programs are in progress but most have competing ideas within them. Against this background, he wanted to highlight what more there still needed to be learned about how institutions shape economic behaviour and national economies.

Williamson identified four main levels of social analyses. These are set out in Figure 8.

Figure 8: Levels of Social Analyses

Williamson's (2000) Levels of Social Analyses		Description	Frequency of change	Action focus
Level 1	Social Embeddedness	Informal institutions, customs, norms, traditions, culture, religion, principles...	Centuries	Often, but not always non- calculative, spontaneous
Level 2	Institutional Environment	Formal 'rules of the game' , especially property rights (polity, judiciary, bureaucracy...)	10 to 100 years	Get the institutional environment right.
Level 3	Governance	Play of the game, especially contracts (aligning governance structures with transactions...)	1 to 10 years	Get the governance right.
Level 4	Resource allocation and employment	Prices, quantities, incentive alignments ...	Continuous	Get marginal conditions right.

Source: author's figure, adapted from Williamson (2000b), drawing also on Oppen (2008).

Level 4 reflects the world of neoclassical economics, where institutions are either ignored or they are assumed to work efficiently in the background. Levels 1 to 3 are shaded in grey, because it is at these three levels that institutions are considered to matter. Starting from the bottom, each of these four levels is described below. Some illustrative examples in relation to the extractive resources sectors are also provided.

3.1.1 Allocation of resources

Level 4 covers the allocation of scarce resources. This is the level of conventional market analyses, where demand and supply set prices and Adam Smith's invisible hand does its magic. The microeconomic assumptions underpinning neoclassical economics have allowed its proponents to concentrate on building coherent models on how economies work. These assumptions have also allowed proponents to simplify, and therefore often ignore, all the issues that lie at level 3 and above. Where level 4 analyses involve forecasting, for example to support long-term investment decisions, it is implicitly assumed that the conditions set at levels 3 and above will not be subject to major changes.

With reference to the extractive resources sectors, level 4 is where short-term commercial transactions are made and where continuously updated information on costs and prices shapes project economics. Conditions that relate to levels 3 and above are factored into project economics as cost variables. For example, if a positive investment decisions involves a large-scale, long-term project that develops extractive resources in a country judged to display a high level of political risk, this would be reflected in an expected high rate of return on the capital investment. Another example of addressing challenges experienced at level 4 by shifting solutions up to levels 3 and above includes deploying legal instruments, such as bilateral investment treaties and stability clauses, to make long-

term investments safer (Maniruzzaman 2008).⁵⁷ Macroeconomic models, conducted at level 4 to help identify ‘Dutch Disease’ and other macroeconomic challenges, have also pointed to potential solutions that could be implemented at level 3. These include, for example, the adoption of stabilisation and saving funds or other so-called special ‘fiscal institutions’ (IMF 2007b).

3.1.2 Governance

Williamson labelled level 3 as *Governance* and described it as the ‘*play of the game*’. This level captures the contractual relationships on the basis of which economic transactions are executed. Contracts and agreements back up the market transactions executed at level 4 and formalise the commitments of the parties involved, lowering the risk they will be cheated. They are typically expected to last for a couple of months to several years.

With reference to the resources sectors, level 3 covers the contractual relationships between the governments of producer countries and resource developers. They also include the contractual relationships between resource developers and state-owned national oil or mining companies, where the latter exist. Level 3 also covers the contractual relationships between resource developers and the companies from which they purchase goods and services and to whom they sell their outputs. For example, these include supply chain contracts and contracts in the midstream and downstream segments of resources projects covering the sale and export of the resources produced. Furthermore, level 3 covers the financial relationships between resource developers and their international investors. Hence, it covers the above mentioned bilateral investment treaties between producer countries and the home countries of resource developers.

⁵⁷ These instruments have been looked at with some controversy. Most recently South Africa has taken the stance that the country is not going to renew bilateral investment treaties. (see: <http://www.project-syndicate.org/commentary/joseph-e--stiglitz-on-the-dangers-of-bilateral-investment-agreements>, last visited on 15.11.2013).

Where relevant, level 3 would also cover the agreements resource developers might have to negotiate and sign with local communities and indigenous peoples. Resource developers would typically involve their legal teams and procurement functions to agree and execute these different types of contractual arrangements.

3.1.3 *Institutional environment*

Level 2 refers to the *Institutional Environment*, which Williamson also calls the '*formal rules of the game*'. This level covers the political, administrative, economic and social systems as well as sector specific legal and regulatory regimes that are country-context specific. For example, this is the level at which the role of the sovereign state in the economy is defined. It is expected that level 2 institutions change less frequently than those covered at level 3. Perhaps they may only change in the course of decades. Importantly, level 2 institutions back up the contracts and agreements entered into at level 3.

With reference to the resources sectors, level 2 covers the resource property rights granted and enforced by a host country's constitution and relevant sector legal and regulatory regimes. This includes the question, 'who owns extractive resources in the first place' and therefore who can issue licences to give international resource developers access to explore and exploit these resources. Level 2 institutions include the national hydrocarbon or mineral regimes as well as international investment regimes on the basis of which companies can negotiate the contractual arrangements that underpin their investment, sales and export decisions at level 3. Level 2 also covers political-administrative conditions such as whether resource developers' tax liabilities are payable to a national government, or whether revenue collection also involves sub-national tiers of government. For example, this would be the case in a constitutional federation, or where a country is made up of decentralised regions or provinces. Furthermore, level 2

covers which public authorities provide public goods and services that affect the cost structure for resource developers' inputs. For example, such public goods and services include the provision of suitably trained personnel that can be employed by the sectors and the availability of infrastructure that allows resource producer to take their produced resources to market. Public authorities across several ministerial resorts play a critical role in providing inputs to leveraging the potential opportunities associated with, and mitigating the negative impact of extractive projects.

3.1.4 *Social embeddedness*

The fourth level is *Social Embeddedness*, coined after the work of economic sociologist Karl Polanyi (1944:1977) and that of his successor Granovetter (1985) and others, on social and economic transformations. Proponents of this school of thought have argued that economic systems are ultimately embedded in social networks and relationships. Analyses at this level focus on the impacts of the most durable social institutions, such as customs, traditions, norms, religion, culture, ideas and principles, on economic decisions. They are the belief systems that shape people's cognitions and subsequently their actions. These institutions are generally perceived to display a great deal of inertia, not least because of the mutually reinforcing social functions they provide. For example, they generate trust and reciprocity.

Institutions at level 1 have typically been of most interest to anthropologists, sociologists, psychologists and some political scientists. These types of institutions may exercise their influence globally, nationally, or among specific local communities and social groups. However, since the mid-1990s some economists have come to recognise that their discipline remains in much need of greater theoretical specifications at this level, in order to better recognise and lay open the influence and impact that these institutions exert on economic decisions and systems. The awarding of the Nobel Prize in Economics to

psychologist Daniel Kahneman in 2002, and to political scientist Elinor Ostrom in 2008, demonstrates this recognition.

With reference to the resources sectors, institutions at level 1 include long-standing sector and industry norms, such as the principles of *'first come, first served'* and *'the law of capture'*.⁵⁸ These principles have become firmly embedded in the sector legal frameworks of many producer countries and have often been reiterated in donor funded sector legal reform programme. Resource sector relevant institutions at level 1 also include the cultural and customary rights of particular indigenous and/or traditional communities. Such rights are usually held in common and may not be formally documented. Their rights may stand in contrast to the legally enshrined private property rights that dominate in modern economic systems and on the basis of which multinational resource developers manage their global investment portfolios. Included at this level are also shared understandings of how energy and mineral markets should work, or how contractual relationships are supposed to be looked at. More recently, international initiatives have succeeded in establishing new industry norms at the global level. An example is the UN's Protect, Respect and Remedy (PRR) Framework on Human Rights⁵⁹. Finally, section 2.3 pointed out that, where industrial policies have delivered the critical functions associated with their success, researchers have stressed their embeddedness within a network of positively coordinating public authorities and private sector entities.

3.1.5 Connecting the levels

Williamson's hierarchy suggests three insights. First, there is no universal definition what institutions actually are. The analyses located within levels 1 to 3 share, at best, notional

⁵⁸ The origins of these two particular principles are further explained in chapter 4 and chapter 6.

⁵⁹ <http://www.business-humanrights.org/SpecialRepPortal/Home/Protect-Respect-Remedy-Framework>
(last visited 07.11.2013)

definitions. For each of these levels, definitions differ depending on the time frame considered (how enduring institutions are) and the functions they provide (i.e. whether they constrain, coordinate and organise, or support the social construction of reality).

The second insight is that economists have primarily focused on level 3 and to a lesser extent on level 2. However, contributions have been made in an eclectic manner, and despite the progress made, economists have generally remained rather ignorant about how institutions work. Williamson traces this partly to the complexity of the subject, where the lowest common denominator is that social scientists agree that ‘institutions matter’; somehow they drive and transform the destiny of societies and economies. There is also growing awareness that greater attention should be paid to the influence of institutions located at level 1. However, Williamson notes that theory development has lagged most at this level. He also recognises that there might be a level 0, including the cutting edge research of psychologists and cognitive scientists, on how the human mind works and the implications for economic decision making.⁶⁰

Thirdly, the hierarchy suggests that each level below is constrained by that which lies immediately above. Figure 9 indicates this with the arrows pointing from top to bottom. Thus, how issues are conceived at level 1 conditions how they shape the rules set out in the institutional environment at levels 2. From there, they further shape governance at level 3. At level 4, the three levels above affect the prices and the quantities of goods and services produced and traded. The upward pointing arrows signal that there may also be feedback mechanisms linking the lower to the higher levels. This raises the question, which way round do institutional change evolve? Williamson suggested that pressure from top down, indicated in Figure 8 by way of the thicker downward pointing arrows, presents the more powerful and durable driver of institutional change. Changes in higher-

⁶⁰ For example, this includes the contributions to behavioural economics such as those made by psychologist Daniel Kahneman (2011).

level institutions carry the greatest potential to transform societies and their economies. He also concluded, however, that there remain many gaps in knowledge of how to connect the different levels. He identified a few topics to which he thought scholars needed to pay a lot more attention, including the role of bureaucracy and that of legal rules. Similar observations made by others will be discussed in Chapter 4 of this thesis.⁶¹

A good example to illustrate Williamson's hierarchy in the context of the resources sectors is the cultural rights of the Indigenous Peoples in Australia.⁶² These rights are located, first and foremost, at level 1. In 1993 the Australian government approved the Native Title Act (NTA), which sets out a process for formalising these informal rights. Thus, it brought these rights from level 1 down to level 2. Under the NTA, resource developers are obliged to identify and confirm who the respective indigenous communities are within the geographical areas for which they hold licences. They then have to establish with these communities what they perceive their cultural rights to be. On this basis resource developers can then start to negotiate indigenous land use agreements (ILUAs). These compensation and benefits sharing agreements bring the customary rights of Indigenous Peoples communities further down to level 3. In terms of both money and times, ILUAs present costs to resource developers. Ultimately, this is where level 1 customary rights impact project economics at level 4. More recent, but also more contentious, attempts to recognise similar informal rights are Bolivia's Hydrocarbon Law of 2005 and Peru's Law on Prior Consultation of 2012.

This example reflects the global challenge facing resource developers that conflicts and tensions over resources are often tied to issues that are located at the intersection between level 1 and level 2. It is at this intersection where the private property rights granted to

⁶¹ For example, Andrews (2013) makes this case with respect to state capacity and the limits of institutional reforms.

⁶² Another example are the collective rights of Canadian First Nations bands, see for example Boutillier and Black (2013).

international resource producers may override long-standing traditional and often commonly held property rights. It is also at this intersection where the question arises whether resource producers pay producer countries a ‘fair share’ of the rent they generate by exploiting resources, in relation to the ‘true’ economic, political and social costs that their activities invoke. The debate on ‘fair sharing’ is often interpreted as relating to the specific petroleum or mineral fiscal regime applied to a specific project or the respective sub-sector. However, it would be more appropriate to include in this debate the full range of quasi-taxation aimed at compensating for these costs. For example, compensation and benefits sharing agreements with local communities could be considered to constitute part of that form of taxation.

Thus, fundamental questions about the role of the state and/or public authorities vis-à-vis both resource developers and citizens arise at the intersection between levels 1 and 2. Conflicts and tensions between these parties often relate to the duties and responsibilities resource developers are expected to meet in relation to the rights and the access to resources that public authorities provide them with. It is, in essence, sovereign states and their formal and informal structures and administrative capacity that balance the provision of rights and, thus, access to resources with the imposition of duties and responsibilities. Resolving these conflicts and tensions requires some sort of a settlement - either mutually agreed or alternatively coerced - between the governments and bureaucracies of producer countries, their citizens and resource producers. Furthermore, agreeing a settlement is not all that it takes. Governments also have to be able to enforce such a settlement, which in turn administrative capacity.

In summary, Williamson’s hierarchy suggests that a good deal of caution should be exercised when notional definitions of institutions are equated with ‘good governance’ and when they are deployed, *as if* they constituted clearly measurable independent

variables underpinned by a clear idea of what is being measured. Just as there are several uses of the concept governance, there is no common definition on what institutions actually are. Adhering to the illusion that there is clarity on what 'good governance' actually means carries the risk that it remains poorly understood what the critical functions are that institutions provide at different levels and how these can be brought about.

Against the background of Williamson's hierarchy of social science analyses, it can be recognised that the ways in which proponents have interpreted institutions has depended on the school of thought that they have - implicitly or explicitly - adhered to. These schools have provided proponents with the ontological reference points that define what institutions have been thought to be. For example, an economist veering off his/her neoclassical training may comfortably operate at level 3. Thus, he/she would interpret institutions as an incentive structure or a policy device to constrain the pursuit of individual self-interest. An economic historian may recognise that at some point in time a certain political-administrative feature, developed over several decades or even centuries, started to serve a particular collective action function that subsequently supported more sophisticated economic transactions. An economic sociologist, in turn, may associate a cognitive role and focus on the power of an idea or a shared understanding that provides economic agents with certainty over a particular choice of actions.

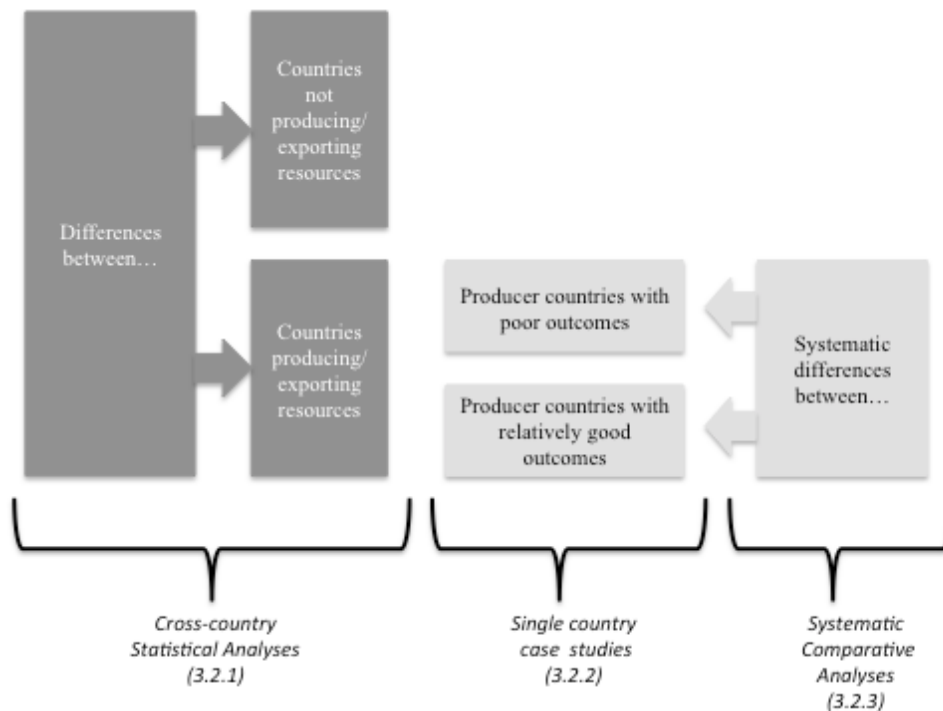
By way of the nature of their profession, academic scholars would be expected to make their assumptions explicit. However, assumptions and implied causalities remain undeclared when proponents of policy advice draw selectively on academic work to suggest practical interventions on how to improve institutions. The risks are that such interventions overpromise on the expected results, or, that they present an ill-suited approach for addressing the actual challenges associated with particular country and

project contexts. For example, a solution that focuses on reforming level 2 or level 3 institutions on the basis that it has seemingly worked elsewhere might do little to resolve challenges that arise from fundamental misalignments between two or more sets of level 1 institutions.

3.2 Methodologies

This section lays out the three main methodologies that proponents have used to investigate the causal connections between the extractive resources sectors, institutions and economic, political and social outcomes. Figure 9 shows these as cross-country statistical analyses, single country case studies and systematic comparative analyses.

Figure 9: Research methodologies



Source: author's figure.

The research underpinning the three debates summarised in Chapter 2 has applied each of these methodologies to provide the evidence for the competing propositions that the extractive resources sectors can, or cannot, contribute to achieving positive economic,

political and social. The next three sub-sections discuss the application of each methodology in turn.

3.2.1 Cross-country statistical analyses

Cross-country statistical analyses have aspired to explain differences in outcomes across countries. In order to identify the variables responsible for such differences, proponents have drawn on formal models to hypothesise the relationship between a dependent outcome variable and a set of explanatory variables. For example, the initial question setting off the ‘resource curse’ debate was whether in terms of GDP, countries more endowed with natural resources had done better or worse compared to those less well endowed. To answer this question, the economic growth models summarised in section 2.1 have served as the base case for identifying systematic differences in economic performance, measured in terms of GDP, GDP growth, or GDP per capita. In addition to the explanatory variables already specified by the respective models, researchers have typically added at least one proxy measuring resource wealth. The prominent Sachs and Warner article (1995, 2001) used an endogenous growth model to confirm a negative relationship between resource export dependence and economic performance.

As discussed in section 2.2, the most commonly applied proxy has measured a country’s dependence on resource exports. Additional variables have also been included, based on the further theoretical propositions that proponents have subsequently put forth. Section 2.2 has referenced an array of studies that have tested interaction effects between proxies measuring resource dependence or wealth and proxies apparently measuring institutional quality.

Among the many studies that have applied cross-country statistical analyses are Atkinson and Hamilton (2003), Bhattacharyya and Hodler (2010), Blanco et al (2014), Boschini

(2007, 2012), Brunnschweiler (2008), Brunnschweiler and Bulte (2008a, 2008b), Collier and Goederis (2007), Collier and Hoeffler (2004, 2006), Dietz et al (2007), Hodler (2004), Korhonen (2004), Leite and Weidman (2002), Mehlum et al (2006a, 2006b), Neumayer (2004), Papyrakis and Gerlagh (2004), Qureshi (2008), Robinson et al (2006), and Sachs and Warner (1995). These studies have provided the evidence for the broadly endorsed conclusion that somehow institutions matter for the economic performance of producer countries. Furthermore, cross-country statistical analyses have not only enquired whether natural resources, possibly in combination with additional variables, make a systematic difference to countries' economic performance. They have also associated resource export dependence with political or social outcomes, usually coding these in a binary fashion applying logit/probit analyses. Quantitatively oriented political scientists have tested differences in outcomes with respect to 'bad' political regimes, and they have also tested theoretical propositions associating resources sector activities with negative social outcomes, such as conflicts and civil wars and greater social inequity.

One of the downsides of cross-country statistical analyses has been their dependence on the availability of large-N data sets. There are only a limited number of countries and comprehensive and consistent data is not always available for all of these. Researchers have drawn on techniques such as pooling annual data or working with period intervals to increase case numbers and improve the statistical validity of results. These techniques treat each period case *as if* it was independent from the preceding or the following periods. The analysis is static. Time and processes are not considered important for understanding how institutions affect economic performance, nor how they are brought about. Additional data challenges, about measuring resource dependence and the range of proxies used to measure institutional quality, were also discussed in section 2.2. In particular, Brunnschweiler and Bulte (2008) and Haber and Menaldo (2011) have illustrated that results are sensitive to the data and proxies used.

3.2.2 *Single country case studies*

There are several single country case studies that have offered rich historical descriptions of the direct and indirect relationships between the resources sectors and a country's institutional framework, its political economy, key policy decisions and other factors, as well as how these have evolved over time in relation to each other. These types of studies have often taken a close look at how structural conditions, and sometimes in combination with individual and collective actions, have shaped particular economic, political and social development paths.

Another set of case studies has been less ambitious. Technical country case studies trace whether countries have adopted, or failed to adopt, certain types of policies, which policy advisory circles have recognised as *best practices*. They typically assess a country's performance on the basis of whether it has adhered to particular economic policies, for example whether it has sufficiently privatised the sector, or if it has met particular performance indicators. Causality with respect to outcomes is not proven, but implied.

The more complex single country case studies can also be split into two groups. One group has focused on countries that have done poorly, whereas the other group has focused on countries that have done relatively well. The first group has associated poor outcomes with the resources sectors, including for example case studies on conflict countries and on those with particularly 'bad' political regimes. Scholars have typically focused on explaining what has gone wrong, and how it has gone wrong. Such studies have traced processes and developments over time. Examples include Karl (1997) and DiJohn (2005) on Venezuela, Adésinà (2012) on Nigeria, Hodge (2004) on Angola, and several other studies on Sub-Saharan African countries riddled with conflicts and poverty (Maconachie 2008, Zulu and Wilson 2012). Some of these studies have corroborated the notion of *rentier state*, or *petro state*, that was discussed in section 2.2. This notion was

coined in the 1970s against the background of shared characteristics observed across the oil-rich Middle Eastern states (Beblawi 1990).

The second group of studies has focused on countries with relatively better outcomes. Statistical analyses would flag these as ‘outliers’; i.e. these countries have been viewed as exceptional and successful against the odds. Chile and Botswana are the most often quoted successful mining countries (Sarraf and Jiwanji 2001, Acemoglu et al 2003, Iimi 2006, ICMM 2007b, Evans 2007, Fuentes 2011, Guajardo Beltrán 2012, Pegg 2012). Meanwhile, Norway has become a reference case for lessons learnt for new oil and gas exporting countries. Case studies on Norway have covered different aspects of the country’s resource sector governance, including its revenue management, its natural resources fund, its local content and industrial policies and its social policies (Noreng 2004, Heum 2008, Kolstad and Wiig 2009, Thurber et al 2010, Mehlum et al 2012). Other examples include countries of the ‘old world’, such as the United Kingdom, other European countries and Australia. Historically, the United States features as an exceptional case that has shaped petroleum sector regimes at the global level (Daintith 2010a, 2010b).

More recently, Brazil has also been looked at more closely (Triner 2011, ICMM 2013a). The Brazilian government sees its country as a success case that could underpin a new development model suitable to guide Sub-Saharan African producer countries.⁶³ This model makes a case for a more balanced relationship between the state and markets, thus calling for more government action to broaden access to economic opportunities. Some argue that Peru should also be considered as a relatively successful country, at least in macroeconomic terms (ICMM 2007a). Ghana, as an established mining country with an emerging oil and gas sector, is also receiving some positive mention for its recent

⁶³ See: The Economist (17 November 2011) <http://www.economist.com/node/21537004/print> (last accessed: 06 December 2013).

political and policy developments (ICMM 2007b). This country is seen as a test case for whether it can go against the odds, compared with several of its West African neighbours such as Equatorial Guinea and Nigeria. For a certain period of time, Indonesia seemed a positive but also controversial case (Ascher 2012).

In summary, single country case studies have focused on the best and the worse, often providing complex and historically grounded arguments how these outcomes have come about. However, some case studies have been less ambitious and have merely described whether or not individual countries have introduced or adhered to the types of (macro-) policies thought to be critical for positive outcomes. Country case studies are often not clear-cut, but leave a rather complex picture as to which variables, conditions and processes have led to the observed results. Negative case studies have supported the popular, and sometimes journalistic and advocacy driven, debate around the question whether extractive resources activities are generally bad for countries. These studies have also supported the construction of the two main narratives, either stressing *rent-seeking* political and economic elites as the problem, or pointing to the structural conditions of *rentier states/societies*. Negative case studies have also supported the formulation of generalised hypotheses about the typical features of ‘bad governance’. In turn, positive case studies have questioned the general applicability of these narratives. They have prompted the search for an answer that pointed to institutions as the factor that can explain differences in outcomes.

3.2.3 *Systematic comparative analyses*

Systematic comparative analyses lie in between cross-country statistical analyses and single country case studies. These analyses contrast two or more cases, chosen on the basis of one, or a combination of two logics. The first logic is to compare cases that share similarities on several dimensions but feature different outcomes. This logic is referred to

as MS/DO: Most Similar but Different Outcomes. The second logic is to compare cases that appear different in several aspects but share similar outcomes. This logic is referred to as MD/SO: Most Different but Similar Outcomes. The rationale is that by systematically comparing cases it is possible to identify which conditions, or indeed combinations of conditions, can explain variance in outcomes (Berg-Schlosser and De Meur 2009).

As shown in Figure 10, systematic comparative analyses have typically contrasted comparable producer countries featuring variance in political, economic and social outcomes. Its proponents maintain that unless theoretical propositions can explain both good and bad cases, it is not possible to ascertain their causal validity. For example, if cross-country statistical analyses confirm a negative correlation between natural resources and poor economic performance, this finding cannot necessarily be taken as proof of causation, particularly if there is at least one case confirming the opposite. Likewise, the varied complex causal explanations for one or the other type of outcome put forth by single country case studies may also be treated with caution, because these cannot *per se* be validated or rejected.

An example of a systematic comparative analysis applying the MS/DO logic is Snyder's comparison of Myanmar and Sierra Leone (Snyder 2006). He identifies these countries as sharing relevant similarities: both countries are endowed with lootable resources that are expected to lead to disorder and state collapse that would render any type of formal economic activity nearly impossible. However, they have ended up with political outcomes that lie at opposite ends. While Sierra Leone experienced the predicated negative outcome, Myanmar's similar disposition to lootable resources has not hindered the emergence of an institutional arrangement that has presented a form of order that has supported the production of resources. Snyder draws on these two country experiences to

build a dynamic political economic framework that focuses on the institutions of extraction. It shows that the *a priori* assumed preferences of political rulers and private sector actors can under certain circumstances lead to an arrangement that produces order and facilitates resources extraction, but they can also result in state collapse.

Another example is Jones Luong and Weinthal's study of the five Soviet successor countries: the Russian Federation, Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan (2001, 2006, 2010). When these countries separated into independent countries in the early 1990s, they shared the same historical trajectory and adopted similar energy policy stances. However, over the course of the next decade, some countries diverged from their initially chosen path. The authors build a theoretical model that ties these choices to the ownership structures underpinning the sector, which they model as a set of social relationships. By dynamically mapping these relationships in relation to a changing international geopolitical context, they explain the divergence in policy choices that has evolved since the 1990s.

Two further examples include Orihuelas's comparison of Chile and Peru - both Latin American countries with very sizeable mining sectors (Orihuela 2012). Chile stands out against Peru, because in the context of this country's domestic political processes dynamic alliances have created a positive institutional endowment where technical professionals could support the adoption of good cross-sector policies. The same has not happened in Peru. Eifert et al (2003) have applied the MD/SO to explore why two political regime types, out of five, share similarly positive outcomes, although this result would have been expected for only one of these two regimes. These authors make the case that different institutional forms can sometimes deliver the same functions.

The advantage of systematic comparative analyses is that they can track and trace developments and outcomes over time, while still retaining the ability to generalise

insights and lessons learned. Unlike those conducting cross-country statistical analyses, proponents are not dependent on the availability of large-N datasets. To investigate resources sectors related questions, they are not tied to selecting cases on the basis of whether countries meet a defined resources export dependency threshold, but whether they share comparable economic, political or social profiles and characteristics.

A further advantage is that these analyses do not adhere to the ‘net-effect thinking’ that guides cross-country statistical analyses. This thinking means that proponents are concerned with identifying the one most important variable that explains the outcome of interest (Ragin 2006). Rather, systematic comparative analyses seek to identify configurations of conditions and associated dynamics that make for variance in outcomes (Rihoux and Grimmer 2006, Rihoux and Ragin 2009). This also gives proponents the ability to identify why similar outcomes can occur, even though *prima facie* it would appear that there are marked differences between the compared cases. For example, the literature on ‘Varieties of Capitalism’ makes the case that different policies and systems across OECD countries have led to similar outcomes, because they share commonalities that deliver similar functions at an analytical level that is higher than that of comparing particular policy choices these countries have made, or the political-administrative systems they feature. This literature was discussed in subsection 2.3 as part of the debate on industrial policy and comparative institutional advantages.

Research on Natural Resources Funds (NRFs) can serve for an illustration of the differences the choice of methodology would make.⁶⁴ For example, the proponent of a cross-country statistical analysis may seek the availability of a large-N dataset to investigate whether the data produces a statistically significant result showing a positive interaction effect between resource export dependence and the presence of a NRF,

⁶⁴ For respective literature see Dabán Sánchez and Héris (2013), Tsani (2013) and Humphreys and Sandbu (2007).

measured with a dummy variable over pooled data. The dependent variable could be measuring economic, or more specifically, fiscal performance. In turn, a comparative policy analyst would ask whether different kinds of NRFs have generally supported better public financial management and why they have done so. Alternatively, the analyst may ask why similar types of NRFs may have produced different outcomes and what additional variables might explain this variance.

Systematic comparative analyses can be built up from single country case studies, where these are undertaken against the background of a shared analytical framework and careful case selections.⁶⁵ For example, the ICMM's Resource Endowment Initiative has compared several countries with sizeable mining sectors on the basis of an analytical framework that has sought to link project level impacts to macro-level results (ICMM 2006). Another example is the work on inter-sector linkages by UNIDO (2011) and Morris et al (2012), mentioned in section 2.3. This work compared eight Sub-Saharan African countries with substantial natural resources sector to understand how the current commodity boom might, or might not, be supporting industrialisation and economic diversification. A systematic comparative approach has also been adopted by sector research led by Stanford University's Energy and Sustainable Development Program, comparing the performance of NOCs (Victor et al 2012) and the political economy of power sector reforms (Victor and Heller 2007). These two studies also show that systematic comparative analyses are not only amenable to investigating resources sectors related governance questions at the country level, but can also look below this level. An example of a study that has compared differences in outcomes across resource-based economic sub-sectors in the wake of serious political instability includes Haber et al (2003)'s study on Mexico. A further example is Firmin-Sellers (1996, 1995) who has

⁶⁵ An example of case study work that is striking for its glaring absence of such a systematic approach is Collier and Venables (2011).

sought to explain differences in outcomes in relation to one resources sector across two regions within the same country.

Of course, systematic comparative analyses also face some challenges. These include that there are not always comparable cases (so called ‘observations’), and that there may be too many potential explanatory conditions and factors across a limited number of cases.⁶⁶

In summary, each of these three methodologies has advantages and disadvantages. These are generally acknowledged by those with a more general interest in the methodological challenges and dilemmas of social science research. In 1994, the publication *Designing Social Inquiry* triggered a prominent debate that is relevant to how questions around resource sector governance have been approached (King et al 1994). This publication supported the view that causal inference is about relating independent variables to a dependent outcome and to strive for the generalisation of explanations. This view has favoured the mainstreaming of cross-country statistical analyses across the social science that occurred in the 1990s and into the 2000s.⁶⁷ This is also the time when most of the cross-country statistical analyses on resource sector governance emerged. These analyses have favoured the generalisation of findings as postulates that should hold irrespective of country and timing context. Critics have argued in turn that the dominant objective to seek generalisations has come at the loss of contextual knowledge and has led scholars away from focusing on the complexity of political processes (Brady and Collier 2004, Levi-Faur 2006). This debate, taking place at the level of philosophy of science, suggests that the ambition to measure the quality of institutions as an independent variable has overridden the objective to understand what institutions actually are, how they work and

⁶⁶ Without here discussing this issue further, methodological advancements have been made that allow investigators to increase the number of logically possible country cases by using techniques such as QCA or Fuzzy Set theory, even if these cases do not exist in reality (Ragin 2006, Rihoux and Grimm 2006, Rihoux and Ragin 2009).

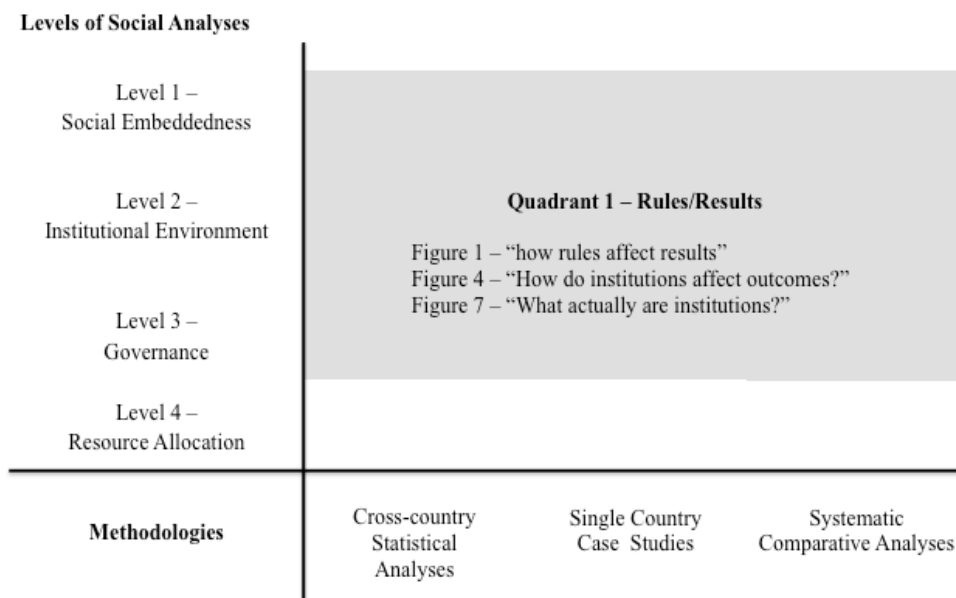
⁶⁷ Notably, at the time Ross (1999) recognised the different approaches that economists and political scientists had taken to studying producer countries. His literature review concluded that the latter should test their propositions against cross-country comparative data.

how they come about. Yet, with respect to the main debates on the governance of the extractive resources sectors, the implications of this debate have not been identified. However, they linger in the background of the focus on institutions and the ontological variety that comes with this seemingly straightforward explanatory variable.

3.3 Observations

Brought together, the two dimensions set out in sections 3.1 and 3.2 create an analytical space within which the relationship between the ontological and methodological choices of the literature on the governance of the extractive resources sectors can be appreciated. This space is set out in Figure 10: on the horizontal axis it shows the three research methodologies; on the vertical axis it shows Williamson's four levels of social analyses; and the three grey-shaded area captures those three levels that relate to 'institutions'.

Figure 10: Quadrant 1 Taxonomy - levels of social analyses versus methodologies



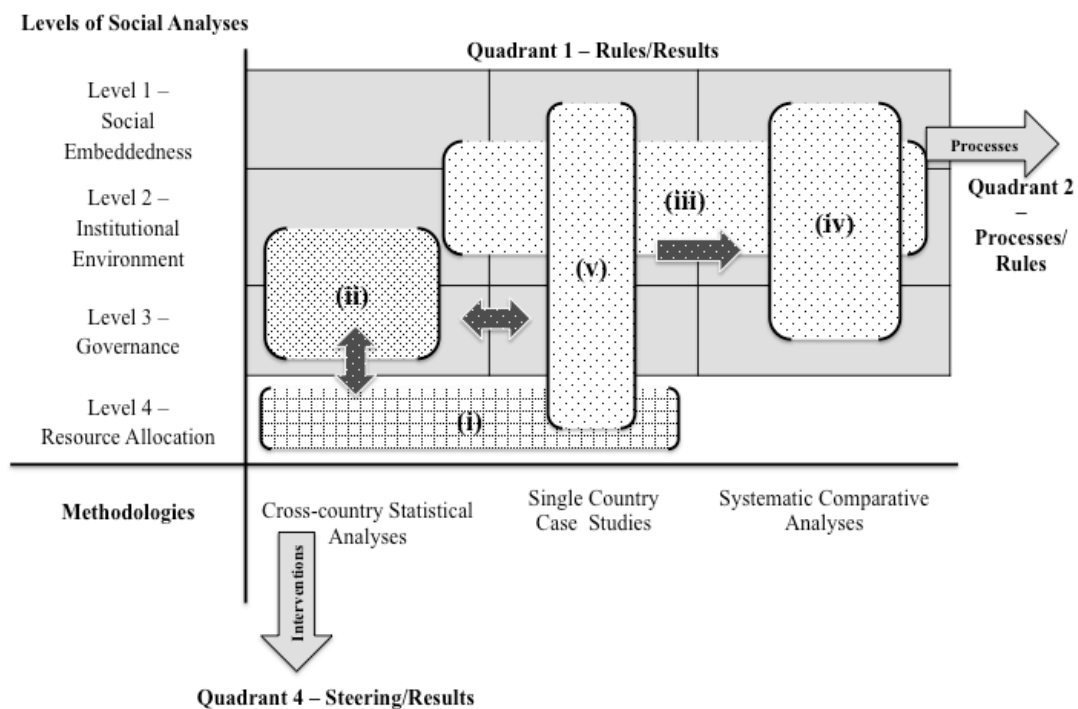
Source: author's figure

Figure 10 indicates that this taxonomy relates to Quadrant 1 of the conceptual framework presented in Figures 1, 4 and 7. Quadrant 1 represents the work where researchers have

associated rules with results, thus also where different types or levels of quality of institutions have been associated with economic, political and social outcomes. The question that this quadrant raises is whether, how institutions have been perceived, has conditioned the methodologies that have been chosen to assess their impact on result and outcomes.

The remainder of this chapter populates this taxonomy with a set of observations. With reference to the literature summarised in Chapter 2, these explicate how methodological choices relate to ontological choices over institutions. The findings are presented in Figure 11.

Figure 11: Quadrant 1 Taxonomy - populated



Source: author's figure.

The first observation is that Debate No 1 on the opportunities associated with investing in the resources sectors is located primarily at level 4. To recall from section 2.1, this literature has included economic growth theories and the cross-country statistical

analyses assessing the impact of foreign investment on economic performance. Where cross-country statistical analyses have shown a negative relationship between the resources sectors and economic performance, macroeconomic models identified and explained the potential downsides associated with export-oriented extractive resources sectors. In Figure 11, this observation is marked with (i). As was discussed in section 3.1, where fiscal policy solutions have been proposed to counter macroeconomic challenges, the debate has moved up to level 3. For example, the proposition to use natural resources funds to manage macroeconomic challenges, presents a *Level 3 Governance* solution to problems identified at level 4.

The second observation is that Debate No 2 on the political economy of extractive resources spreads across almost the entire grey shaded area. It runs across all three levels of social analyses that have used institutions as an analytical concept. It also runs across all three types of methodologies. However, within this space the two main schools of thought that were summarised in section 2.2 occupy different locations that are diametrically opposed to each other. First, proponents of explanations that have built on the rent-seeking argument and rational choice institutionalism have predominately viewed institutions as constraints that avert the collectively negative outcomes to which the individually rational interests and incentives of politicians and bureaucrats would otherwise lead. These types of studies are mostly located at level 3, occasionally veering also into level 2. There is also a clear predominance of cross-country statistical analyses. In Figure 11, the location of these studies is marked with (ii).

Second, explanations that build on structural institutional analyses are more firmly located in the space of level 2. Sometimes they even veer into level 1, for example when cultural factors are held up to explain the nature of a particular state and/or its governments. The space that these explanations occupy is marked with (iii). This space

shows that analyses are not dominated by one methodology. In fact, some proponents have deliberately applied more than one methodology to address the weaknesses that each methodology by itself entails. An example is Dunning (2008) and his study of the relationship between the extractive resources sectors and democracy.

The third observation is that structural institutional explanations overlap with the space marked (iv), which represents systematic comparative analyses. This means that while systematic comparative analyses may generally focus on level 2 type institutions, they also look above and below to recognise the role of agency. Agency is motivated either by level 1 institutions, such as shared norms, customs, traditions, or principles; or level 3 institutions that constrain or enable particular actions. For example, Debate No 3 on linking the resources sectors with other economic sectors has been dominated by systematic comparative analyses. In this context, institutions at level 1 have included the prevailing ideas about the role of the state in the economy and thus the embeddedness of industrial policy in the relationship between the public and the private sector. The commensurate institutions brought down to level 3, for example, would be mandatory requirements to deliver on local content. However, they could also include industry-wide arrangements encouraging collective action to support skills development.

The fourth observation is that structural explanations have often been put forth in single country case studies (e.g. Karl 1997). This is why they share the vertically overlapping space marked with (v). The interesting observation about this space is that there are often several single case studies for the same country. Proponents have pitched their arguments at different levels, right from level 4 up to level 1. For example, country case studies on Botswana have drawn on macroeconomic explanations at level 4 and 3 (Iimi 2006), right up to explanations drawing on historical institutionalism and analytical narratives at level 2 and 1 (Evans 2007, Acemoglu et al 2003). It poses a challenge that none of these

studies can be proven to be wrong. But the policy conclusions that one could draw from each could be quite different.

From the perspective of practitioner working with the extractive industries, an interesting question is where, within Quadrant 1, would one locate the impact assessments conducted for specific extractives projects. These assessments do not *per se* constitute social inquiries about producer countries. However, they are invariably informed by the results of such inquiries. For example, an assessment of the impacts on the cultural rights of indigenous people may draw on insights that relate to level 1. In contrast, an environmental assessment may draw on level 3 to consider the quality and enforceability of existing environmental regulation in light of the projected physical impacts. A tension noted in the specific literature on project-focused impact assessments is that the regulatory approach to environmental and social impact assessments, i.e. locating such assessment solely at level 3, undermines their function to serve as a mutually trusted tool for communication (Vanclay and Esteves 2011). It is this function that has prompted the introduction of such assessment in the first place, in order to resolve conflicts and tensions that are mostly located at the intersection of level 1 and level 2 institutions.

The four key messages that one can derive from the populated taxonomy and the observations it holds are the following: first, the macro-economic and fiscal analyses conducted at level 4 have looked for solutions at level 3 to address the challenges these analyses have identified. This is shown by the arrow pointing from space (i) to space (ii).

Second, single country case studies that have developed explanations for outcomes spanning across more than one level may have prompted systematic comparative analyses aimed at explaining variance in outcomes. The arrow pointing from space (v) to space (iv) shows this influence.

Third, the two-sided arrow pointing between single country case studies and cross-country statistical analyses suggests that negative country case studies have informed the rent-seeking hypotheses that proponents have tested with cross-country statistically analyses. Also, positive country case studies such as those on Norway, Chile and Botswana have plugged the gap between the generically framed conclusion that the quality of institutions matters for outcomes and the proposed measures that producer countries should adopt to improve theirs. For example, these have included introducing natural resource funds and other special fiscal institutions to strengthen macroeconomic and fiscal management, improving transparency around resources revenues, and publishing and revising contracts and reforming sector legislation and regulation.

Finally, the work located to the left hand side of Figure 11 has focused mainly on testing theoretical propositions, derived either from theory that has been developed on the basis of in-depth case studies or from a priori assumptions adapted from microeconomic assumptions about the behaviour of individuals in relation to political and policy decision making. In contrast, the work located on the right hand side of Figure 11 has more often focused on developing theory on the basis of contrasting and comparing in-depth analyses of several country cases.

The thicker arrows, labelled 'Interventions' and 'Processes' indicate how the taxonomy connects to Quadrant 4 and Quadrant 2, respectively. Those who have emphasised testing theoretical propositions for their general applicability have provided the connection between Quadrant 1 and Quadrant 4. These proponents have either sought to warn of alleged fundamental risks associated with the exploitation of extractive resources, or they have striven to identify interventions that could turn the prospect of bad outcomes into potentially good outcomes. That is the global agenda on the good governance of the

extractive resources sectors with its mission to identify, which rules have led to better results and where ‘good institutions’ are considered an input to achieving outcomes.

In contrast, those who have emphasised theory development on the basis of systematic comparative analyses (but also case studies) have generally not shared this ambition. Their interest has been to navigate the complexity of multi-level processes that underpin changes in institutional arrangements across more than one of the three levels of social analyses. This interest provides the connection between Quadrant 1 and Quadrant 2. Proponents have not viewed institutions as an input to achieving better outcomes, but as an outcome of such processes. Chapter 3 follows this arrow to discuss the literature on how institutions change.

3.4 Summary: institutions matter, somehow

This chapter has asked the question: *what actually are institutions*. Its discussion of the four levels of social analyses and their respective views on the role that institutions play has made it clear that there is not one answer to this question. However, it is widely acknowledged that institutions matter, somehow. This conclusion is the basis of the global agenda on the good governance of the extractive resources sectors.

The chapter has argued that proponents’ ontological choice on how they have viewed institutions has conditioned their choice of methodology that they have then applied to produce the empirical evidence that has supported this global agenda. Its proponents have argued from a methodological individualist perspective and have advocated institutions as devices to control the actions of politicians, bureaucrats and resource producers to ensure the wider public benefits from the extractive resources sectors. They have applied cross-country statistical analyses to test whether the quality of institutions can be positively associated with the quality of outcomes. This approach has required choosing

proxies that could be seen to measure the quality of institutions by means of putting forth plausible narratives to corroborate this story line. The ability to draw general conclusions from this approach appealed to the methodological debate that occupied social science research at the time when most of these analyses were conducted. To recall, this was the discussion prompted by *Designing Social Inquiry* that causal inference is about relating independent variables to a dependent outcome and to strive for the generalisation of explanations (King et al 1994). However, when proxies for institutional quality left it rather unclear what they actually measure, proponents simply looked towards the more successful countries to identify particular sector institutions that could corroborate the plausible narratives that their cross-country statistical analyses had put forth. These particular types of institutions are typically located at level 3 and level 2 of Williamson's hierarchy.

Others have viewed institutions differently: as collective manifestations of social relationships that have evolved over time. These place constraints on agency in ways that are subtler than suggested by those that subscribe to the methodological individualist perspective. They have also seen institutions as enablers for agency, for example by bringing parties together to engage in collective action and establish social order. Proponents have been less tied to one particular type of methodology, but have generally leaned more towards conducting single country case studies and systematic comparative analyses. They have also proposed that institutions connect across the different levels. Hence, rather than honing in on particular sector institutions, they have emphasised coherence and complementarity across the different levels. Not least, this has made it more difficult to draw generalisable conclusions on how producer countries should improve the governance of their extractive resources sectors. The emphasis is on processes by which greater coherence and complementarity can be achieved, for example

when producer countries grapple with conflicts and tensions that arise between different constituencies at the intersection between level 1 and level 2 institutions.

4. How do institutions change?⁶⁸

The previous chapter concluded with the consensus that, whichever way defined, institutions matter. However, knowing that institutions matter is not the same as knowing how they come about and how they are changed, particularly if there are several perspectives on what they actually are. For those who aspire to support positive institutional change, it might be useful to recognise what social science research that has focused on how institutions emerge and how they are changed.

This chapter argues that this research views institutional change as the outcome of contingent processes that results in the profound transformation of the structures that underpin economic, political and social exchanges. This view challenges the liberal approach that promotes institutional reforms as a technocratic exercise where politicians, bureaucrats and their advisors choose among more or less generic institutional designs and adopt these in an apolitical manner.

4.1 Institutional reforms in the extractive resources sectors

The liberal technocratic approach has guided the institutional reforms that have taken place in the extractive resources sectors over the past decades. As discussed in Chapters 2 and 3, experts have advised producer countries to adopt blueprints and best practices to reform dated sector institutions. They have promoted model laws and regulatory frameworks, fiscal regimes, contracts and organisational-set ups. Countries in Latin America and Sub-Saharan Africa have followed a similar pattern to privatise their national resource companies and introduce legal, regulatory and related reforms (Campbell 2008, 2013, Bastida 2008). By adopting the proposed sector-specific reform templates, producer countries have, by and large, attracted significant amounts of foreign

⁶⁸ This chapter draws in part on Dietsche (2012, 2013) published in Hujo (2012) and Dannreuther and Ostrowski (2013).

investments in known resource deposits and have succeeded in encouraging interest in new exploration activities.

The adoption of such sector-specific institutions has been driven by the objective to encourage positive investment decisions. International development agencies supported such efforts in the aftermaths of the economic crises of the 1980s in an effort to kick-start ailing economies by attracting foreign investors to the extractive resources sectors of developing countries. The reform model at the time was to move away, as far as possible, from the discredited state-led approach to development that dominated public policies in the 1960s and 1970s. The assumption has been that generic liberal reform models could be applied indiscriminately across different producer countries. The good governance agenda has not altered this assumption. It has merely refocused the types of blueprints and best practices that producer countries are advised to adopt.⁶⁹ From institutional reforms targeted at attracting foreign investment it has moved to suggesting reforms that increase transparency and reform sector institutions along the lines of the models drawn from selected well performing countries.

4.1.1 Reform reversals

At the level of producer countries, the adoption of the mainstream liberal reform agenda has unfortunately not consistently delivered the results expected of them. Although many countries have experienced positive economic growth at the aggregate level, outcomes have been less convincing in terms of translating the rents generated from foreign investments in the extractive resources sectors into broad-based developmental and social outcomes that could be measured by improvements in social indicators.⁷⁰ These mixed outcomes have led a number of countries to review the liberal approach to institutional reforms.

⁶⁹ See for example Van der Ploeg (2013).

⁷⁰ This is documented in several case studies, including those conducted by the ICMM.

Some countries have gone as far as to fundamentally reconsider this approach. Among the more extreme cases are Bolivia and Venezuela; both countries have at least in part re-nationalised their extractive resources sectors. Other countries have reformed, or are still in the process of re-reforming, the legislative and regulatory frameworks and model contracts that they had introduced just a few years ago, in order to strengthen again the position of public authorities to command control over these sectors. This has included strengthening the role of the NOC, re-introducing national mining companies and revising sector fiscal regimes. Examples include the case of Tanzania, where Parliament passed a new Mining Act in 2010 revising the Act it had introduced in the mid-late 1990s.

Peru also introduced a new mining code in the early 1990s. This was done almost overnight under emergency rule and by executive decree. At the time it was considered an opportunity to seize the momentum of an economic and political crisis could to introduce a new mining legal regime. However, after a decade of repeated and worsening incidences of tensions and conflicts, several changes had to be made to this regime. Policy shifts towards greater state involvement have also occurred in some of the countries of the former Soviet Union, including Kazakhstan and the Russian Federation (Jones Luong and Weinthal 2001, 2006, 2010).

In a number of sub-Saharan African countries contract renegotiations have been underway. Liberia has renegotiated a minerals development agreement with steel maker Mittal Steel, supported by an international public campaign led by Global Witness. Guinea (Conakry) has revisited its minerals development agreements that affect Rio Tinto's large iron ore project Simandou as well as the operations of the Russian Federation aluminium company Rusal. In 2008, the Zambian government set aside the mineral development agreements that it had entered into with individual mining

companies only a few years earlier, replacing these with a new Mines and Mineral Development Act with only minimal prior consultation.

4.1.2 Explaining reversals and backtracking

Several plausible explanations have been put forth to explain why countries have not upheld the outputs of their liberal institutional reforms. The first of these is '*resource nationalism*'. It purports that, if prices and demand rise, the governments of producer countries have greater incentives to demand a higher share of the rent that the resource developer produces, compared to that which they were happy to accept during an earlier low-price, low-demand period (Kretzschmar et al 2010).⁷¹ The global upturn in commodity prices since around 2000 has lent this explanation credibility.

A second explanation has referred to the '*obsolescing bargain*'. This concept dates back to the early 1970s when Vernon (1971) proposed that once a resource deposit had been discovered and capital investment had been sunk into developing it, the bargaining power over how to share the rent shifts in favour of the producer country.⁷² At this point governments would become inclined to change the terms of the original contract to demand a higher fiscal stake. Over the past two decades, many producer countries experienced substantial increases in foreign investment to the extractive resources sectors, where capital has been sunk into projects that have moved into the production phase.

Proponents of the school of thought on *rent seeking* propose a third explanation (subsection 2.2.2.2). The backtracking from the ideal-type institutional reform path is interpreted as the result of unwilling politicians and bureaucrats not wanting to properly

⁷¹ This is a narrow definition of resource nationalism, ignoring the ideological shift that is sometimes associated with it between state-led and liberal economic management. For further discussion, see Stevens (2008).

⁷² In the original text, Vernon distinguishes between industrialized and developing countries and he attributed this problem only to the latter, though giving no explanation why this should be the case.

implement liberal institutional reforms. Disappointing outcomes are explained with governments' lack of political will. Not least, this predisposition is thought to show its face because commodity prices have taken an upward turn and new projects with capital already sunk have started to commence production.

A fourth explanation, still in the making, associates reform reversals with pressure put on politicians and bureaucrats to deliver more tangible domestic benefits from the exploitation of extractive resources to domestic constituencies.⁷³ Among the plausible reasons are that some governments may find it increasingly costly to ignore the possible negative local and macro-level impacts of extractive resources activities. The political costs of maintaining a narrow political basis to support these activities at the expense of neglecting other economic sectors may also have been increasing, while at the time it has become less acceptable to deal with popular discontent in a coercive manner. Pressure on politicians and bureaucrats may have intensified because of factors that have reduced the costs of social constituencies to organise and voice discontent, for example because of urbanisation, democratisation, and the use of electronic social media and other means of information exchanges.

4.1.3 Challenges

Each of these four explanations faces challenges. The first two explanations, focusing on '*resource nationalism*' and the '*obsolescing bargain*', are well aligned with the logic of the liberal approach to institutional reform focusing on attracting foreign investment to countries that faced economic crises. Both suggest a bilateral zero-sum bargaining relationship between resource developers and the governments of producer countries.

⁷³ The author maintains that this explanation can be read out from the literature on the need for resource developers to deal better with the expectations of local communities and producer countries, and the literature on the sources of conflicts and collaboration between resource developers, producer country governments and third parties.

Thus, when external conditions change reversals and backtracking are predicated. However, this logic fails to explain why not every producer country has responded in this way and why, among those countries that have responded in this way, some have gone further than others. Reversals and backtracking are usually also only viewed as problematic when they beset lower-income countries. They are rarely considered to fundamentally deter resource producers investing in higher-income countries. This suggests that there are different expectations about the behaviour of domestic constituencies, including politicians and bureaucrats, and how these interact. These are not spelled out, other than superficial commentary about the lack of ‘good institutions’ or the persistence of ‘bad governance’.

Because of its close affinity with the rent-seeking explanation of the political economy of the extractive resources sectors, the third explanation shares this school of thought’s conclusion that ‘good institutions’ are key for bringing about positive outcomes. It bolsters the global agenda on the good governance of the extractive resources sectors and its demand for greater transparency in the expectation that this will result in greater accountability. Somehow it is hoped that greater transparency could result in a fundamental, possibly even revolutionary, change in political leadership. However, this expectation cannot explain how the uncommitted politicians and bureaucrats and their personal interests on whom poor outcomes are blamed can turn around to commit to transformational institutional change. Even if political leaders were to change, better outcomes would not be guaranteed. A characteristically similar new elite may simply replace the old elite. There is no explicit theory of institutional change, but the mere expectation that greater transparency will somehow alter the behaviour of key domestic

constituencies.⁷⁴ At the same time, there is little evidence that transparency alone can bring about the broader social transformations that can fundamentally change the elite structures underpinning political leadership.⁷⁵

The fourth explanation, at least, offers a starting point for setting out a theory of institutional change that would seek to link developments in the global energy and minerals markets with the domestic conditions and collective actions in producer countries. This is the *alternative perspective* suggested in Figure 2 of Chapter 1. Crucially, this conceptual perspective pays closer attention to different country contexts and therefore recognises that there exists an ambiguity between institutional forms and the functions these provide in each particular country contexts. Those who have compared capitalist market economies are well aware of this ambiguity. They point to considerable diversity in institutional forms across industrialised countries and the similar functions that these have produced at a higher analytical level.⁷⁶

Meanwhile, the liberal approach to institutional reforms, both in its older and its newer good governance version, has focused on institutional forms. It has relied upon macro-level variables to explain bad outcome, spending little time identifying the micro-level functions through which positive outcomes are actually achieved. Thus, it has ignored that alternative institutional forms can, and perhaps should, be considered in order to deliver desirable institutional functions (Chang 2007, Pagano 2007, Andrews 2008, 2013, Fukuyama 2013). Chapter 3 made the case that its proponents have primarily focused on demonstrating statistical links between outcomes and proxies measuring the quality of

⁷⁴ Notably, the initiatives supported by international NGOs and development agencies are increasingly being challenged about their weak and implied theory of change. For example, see GIZ (2011) IDS (2010), and Mejía Acosta (2010).

⁷⁵ There is insightful evidence from the public financial management reform literature, documenting that where greater transparency has limited the abuse of tax and other revenue channeled through the central government budget patronage payments have simply migrated into off-budget transactions and resulted in the accumulation of liabilities that may only surface at a later point in time (Cangiano et al 2013).

⁷⁶ These studies include the work on ‘Varieties of Capitalism’ discussed in sub-section 2.3.2.2 on industrial policy and comparative institutional advantages.

institutions. However, in tracing how poor outcomes have really come about, it is not enough to merely draw on plausible narratives that emphasise government or state failure by pointing to some apparently wrong form of institution in place.

Not least, the difference between institutional forms and functions is worth recognising, because institutional theories typically emphasise the micro-level functions that ‘good institutions’ provide towards enhanced economic exchange. Initially it was economic historians and sociologists who developed such theories based on their empirical research tracing improvements in technology and labour productivity to transformational institutional change (North et al 1966, Moore 1967, Polanyi 1977:1944, North 1990, Tilly 1992, Olson 2000, Bates 2001, Mahoney and Rueschemayer 2003, Greif 2006, North et al 2009). It is these proponents who have also put forth the working definitions of what institutions actually are. Their emphasis on functions has stressed that institutions can help address information asymmetries. They can also reduce transaction costs, turn uncertainties into calculable risks and help overcome collective action problems. They can also resolve commitment problems and therefore help to ensure that economic transactions can be completed without the contracting parties having to fear being cheated. Functions such as these have been associated with the ability of economies to produce and trade more sophisticated goods and services over longer distances and extended time frames. At the same time, these proponents also recognise that institutions are not good *per se*. It is also institutions that can undermine these functions by, for example, increasing information asymmetries and transaction costs for some constituencies and reducing them for others.

4.2 Theories on institutional change

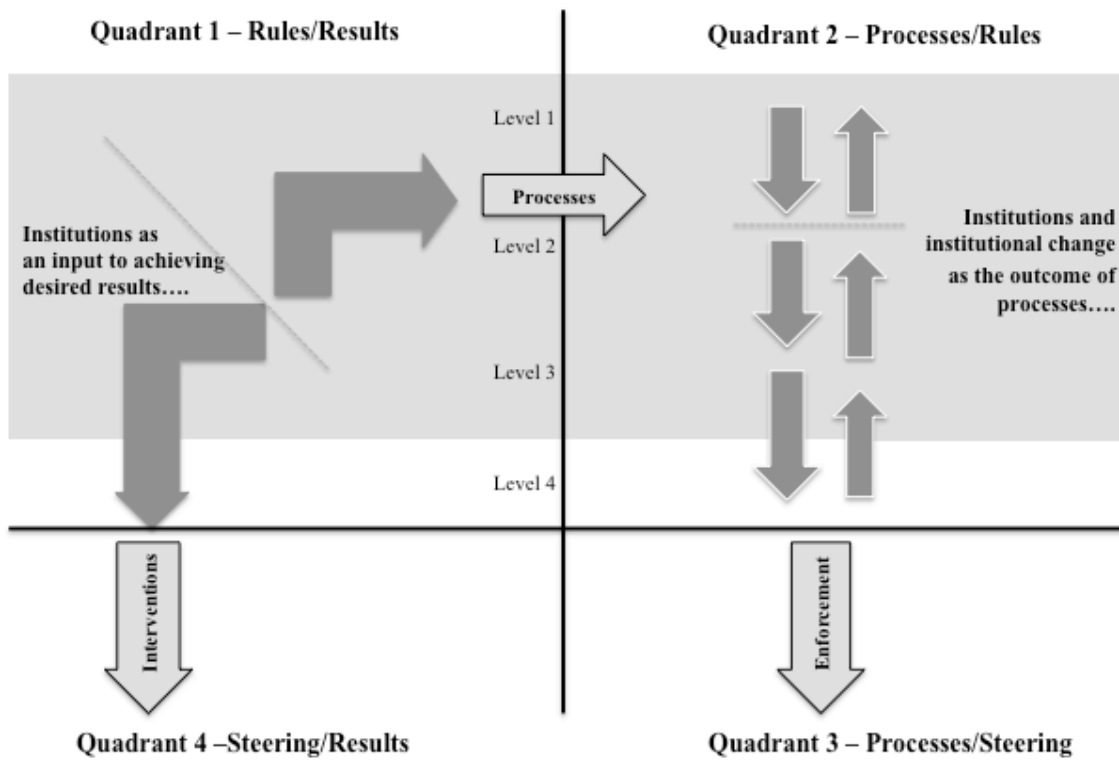
Theories on institutional change are as varied as there are definitions of what institutions actually are. They reach from proponents who see such change as an evolutionary process

of natural selection to those that suggested institutional change processes are guided by ideologies and principles (Kingston and Caballero 2008). However, there is a common denominator across the various theories: they all seek to explain major transformations in the structures that underpin economic, political and social exchanges and why these have occurred (Immergut 2005). For example, such transformations typically include changes in political regimes and in economic systems. These often involve constitutional changes and changes in property rights, which are sometimes associated with fundamental shifts in the distribution of domestic and geopolitical power and resources. Another common denominator is that proponents of theories of institutional change have typically pursued a systematic comparative perspective in order to understand the processes that have set off such transformations, why they have happened in some countries but not in others, and why they took off in one direction in some countries but in another in others.

Figure 12 depicts Quadrant 1 and Quadrant 2 of the conceptual framework matrix on the four uses of the governance concepts. The social science research on institutional change sits in Quadrant 2, where such change is seen as the *outcome* of contingent processes.

Quadrant 2 suggests that processes of institutional change run across the various levels at which social scientists have analysed institutions, irrespective of how precisely they have defined them. This means that institutional change happening at one level is poised to require commensurate changes at other levels. Williamson (2000) has suggested that each higher level conditions those that lie immediately below, but there are also feedback loops from the bottom up. This is indicated with the downward and upward pointing arrows. Recalling also from Chapter 3, conflicts and tensions over resources have been observed to occur most often at the intersection between levels 1 and 2. Figure 12 indicates this with the dotted horizontal line.

Figure 12: Institutional change – input versus outcome



Source: author's figure.

Quadrant 2's focus on institutional change as the outcome of processes differs from most of the work on the governance of the extractive resources sectors that was summarised in Chapter 2 and is located in Quadrant 1. As indicated in Quadrant 1 of Figure 12, proponents of the liberal approach to institutional reforms have typically viewed the 'quality' of sector specific institutions as an *input* to achieving desired results. With reference to Williamson's hierarchy, they have stressed that the desired outcomes located at level 4 can be achieved by reforming sector specific institutions at levels 3 and 2. This logic is reflected by the dark-shaded leftward and downward pointing arrow of Quadrant 1 that points from levels 2 and 3 down to Quadrant 4. Meanwhile, the dark-shaded upward and rightward pointing arrow shows the overlap between the systematic comparative analyses on extractive resources sectors explained in Chapter 3 with the social science research on institutional change. Figure 12 indicates the fault line between

these two schools of thought with the dotted diagonal line running between the two dark-shaded arrows.

Contrasting these two perspectives on institutional change conveys several strong messages. First, placed in different country contexts similar institutional forms may deliver quite different functions. Meanwhile, it is possible to achieve similar functions through different institutional forms (Chang 2007, Pagano 2007, Andrews 2008, 2013, Fukuyama 2013). This message renders questionable the mainstreaming of institutional forms as the substance of the liberal institutional reform agenda. It suggests that more thought needs to be given to the question how proposed institutional reforms may interact with the already given institutional arrangements of producer countries.

Second, doubts are also cast on the narrative that liberal institutional reforms are a suitable means to contain the risk of government or state failure. The liberal institutional reform agenda has built on the rhetorically convenient dichotomy of state failure versus market failure. However, the institutional forms typically associated with this dichotomy are not *per se* features of ‘good governance’ and they cannot guarantee the desired functions. Thus, the alleged risk of state failure is a poor guide for deciding on the content of institutional reforms. Meanwhile, proponents who have focused on the micro-level functions of institutions have stressed that state failure and market failure have common causes: institutions can address, but also cause, both types of failures. In their effort to understand how institutional change relates to bringing about major transformations in economic, political and social structures, these proponents have usually refrained from deliberating suggestions on how institutional reforms should be conducted to deliver these functions in different country contexts. They also have not suggested that there is but one institutional reform agenda that can deliver these functions.

Third, for policy advisors supporting the liberal approach to institutional reforms, the debate on ‘good governance’ has provided a convenient explanation for why outcomes have been mixed (Mkandawire 2012). Rather than revisit this reform approach *per se*, they suggest that differences in outcomes are due to what politicians and bureaucrats have made out of it. This explanation has left resource developers in a difficult position. By gaining access to extractive resources they have benefited from the liberal approach to sector institutional reforms. However, the advocacy behind the good governance agenda expanding the liberal approach sees resource developers acting in a socially irresponsible manner if they are working in producer countries where the government and its state apparatus are seen as the source of ‘bad governance’. At the same time, they are in at least some producer countries facing increasing challenges to safeguard their access and rights to resources. This challenge is not the result of the global good governance agenda, but the expectations that the governments and wider social constituencies in producer countries are raising vis-à-vis resource developers. As suggested in relation to Figure 2 in sub-section 1.2.1 discussed in the introduction to this thesis, there would appear to be several disconnections between the developments that take place at the global, the national and the local level. Figure 2 contrasted the top-down *conventional perspective* that underpins the global agenda on the good governance of the extractive resources sectors against an *alternative perspective* that set out a multi-level playing field linking internal changes in producer countries with global energy and mineral markets and the operating environment of resource developers. To recall, the key message of the discussion around Figure 2 was the theory of institutional change implicit in the conventional perspective is too simplistic, because it presumes it is possible to generalise recommendations for institutional reforms across different country contexts.

Fourth, the evolving debate on how to build cross-sector linkages between the extractive resources and other economic sectors throws further challenges at the liberal good

governance institutional reform agenda. Turning sub-soil natural resources into other forms of human and physical capital is about integrating the extractive industry sectors with the rest of the producer country's economy. The experiences of countries that have used their extractive resources industries as a catalyst for industrial development challenge the unqualified adoption of the liberal institutional reform agenda, because they are supporting the re-discovery of industrial policy as a legitimate policy tool to support economic and social transformation.

4.3 Property rights – input versus outcome

This section discusses the social science literature on property rights to further illustrate the difference between the liberal approach to institutional reforms and the concerns raised by its critics. There are three reasons why this literature suits this objective. First, it overlaps with the literature that which focuses on the dynamics underpinning major economic, political and social transformations. Second, the concept of property rights has been applied to investigate a wide range of economic, political and social challenges in relation to the governance of natural resources (Bates 1989, Alston et al 1996, Firmin-Sellers 1996, De Soto 2000, Ostrom et al 2003, Haber et al 2003, Evans 2007, Scott 2008, McHarg et al 2010). Third, the liberal institutional reform agenda has emphasised the provision of stable property rights as an important prerequisite for attracting foreign investment.

Property rights are a well-established analytical concept in the social science literature. They are broadly defined as a set of interpersonal relationships that underpin the ability and the power of economic agents to use, manage, transfer or alienate resources, or to take an income or rent from their use. Thus, property rights are located at levels 1 and 2 of Williamson's hierarchy. A well-recognised definition suggests that they are '*social institutions that regulate the use of scarce resources by assigning and enforcing rights*

and duties' (Eggertsson 2005, p. 27). Social institutions are defined as the humanly devised constraints and associated enforcement mechanisms that generate incentives, behaviour and outcomes in social groups (North 1990). Sometimes, property rights are described as a 'bundle of rights', because they are often granted with varying degrees of exclusivity, flexibility, duration, transferability, divisibility and quality of title (Scott 2008). For example, the licenses granted to resource developers may be valid for a shorter or longer period of time and rights to resources may be transferred at an earlier or later stage of the production process.⁷⁷

When the social science concept of property rights is applied to the resources sectors it has to be remembered that property rights are social constructs that comprise rights and responsibilities enforced not only by formal, but also informal rules (Firmin-Sellers 1996, Haber et al 2003, Acemoglu and Johnson 2005, Chang 2007, Scott 2008, Watson Hamilton and Bankes 2010). It is social institutions that make rights to extractive resources real. The formal rules comprise sector legal frameworks, which formalise these rights to a greater or lesser extent.

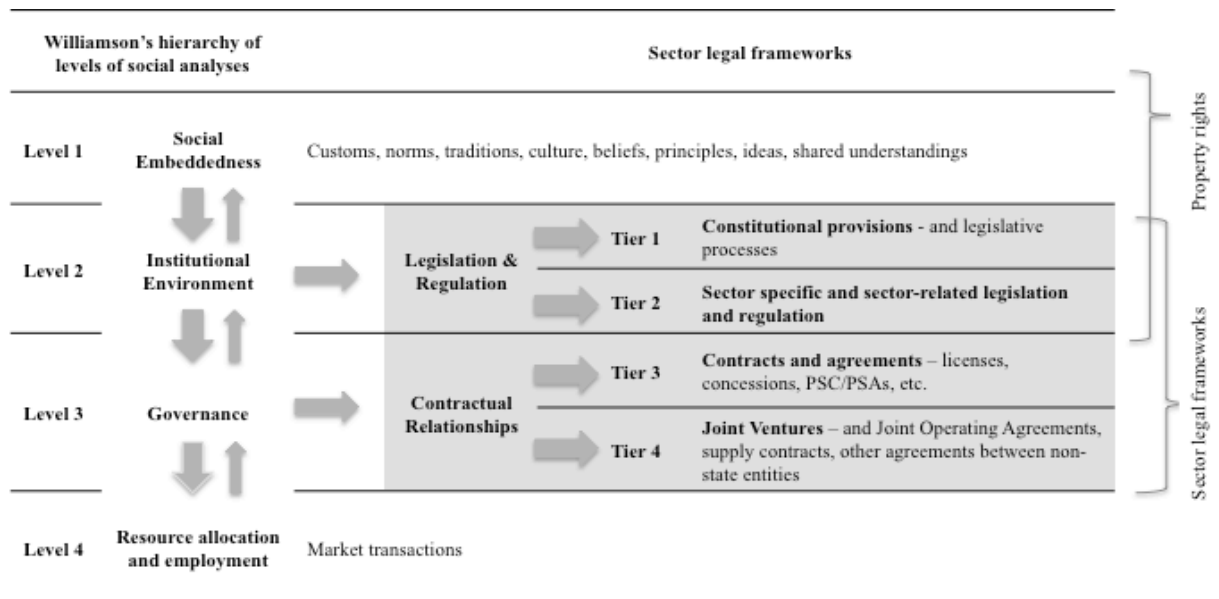
Figure 13 maps the four tiers of sector legal frameworks into the appropriate two levels of social analyses of Williamson's hierarchy. Notably, sector legal frameworks start at level 2 of the hierarchy; which alerts to the challenge raised in Chapter 3, and also highlighted with respect to Figure 12, that conflicts and tensions around access to extractive resources often occur at the intersection between levels 1 and 2.

The first and second tiers comprise the producer country's *Constitution* and its *Sector Legislation*, respectively. Both are situation at level 2 of Williamson's hierarchy. Placed within level 3 are the third and the fourth tier of sector legal frameworks. The third tier comprises the *Contracts and Agreements* between the resource producer and the

⁷⁷ For example, this is reflected in the legal differences between concessions and contractual regimes that are discussed in Chapter 6.

government as well as other third parties, including its supply and sales contracts. The fourth tier comprises the contractual arrangements that may exist between the members of a resource developer consortium, such as for example *Joint Venture* and Joint Operating Agreements between majority and minority partners and between the operating and non-operating partners.

Figure 13: Property rights and sector legal frameworks



Source: author's figure.

The analyses located in Quadrant 1 have seen particular aspects of sector legal frameworks as critical inputs to achieving positive outcomes. For example, the liberal institutional reform agenda has focused on making Sector Legislation particularly attractive to foreign investors; meanwhile the more recent contract transparency agenda demands open contracting as a potential panacea to improve sector governance and thus achieving good outcomes. Meanwhile, the analyses located in Quadrant 2 see the various tiers of sector legal frameworks as the outcome of multi-level processes of institutional change. They conjecture that getting these aligned precedes the achievement of positive outcomes.

4.3.1 *The liberal school of property rights*

The most prominent strand of the property rights literature is the liberal school of property rights. This school sits firmly within Quadrant 1 and has provided the intellectual basis for the sector reform approach promoted during the 1980s and 1990s. It has emphasised the provision of well defined and secure monopoly rights as a critical ‘input’ for private investment in the resources sectors.

In the early 1960s, Ronald Coase made a crucial contribution to this school. He suggested the assumption that in the absence of transaction costs self-interest will always guide the members of a society to contract for the establishment of political structures and systems of property rights that maximise national wealth (Coase 1960). This contribution evolved into the ‘Coase theorem’, where its proponents drew on this assumption to support the narrative that self-interested economic agents prefer exclusive private property rights and that they are less keen on rights that they have to share with others. Economic agents were thought to take better care of their *own* property, so more exclusive rights would generally be better for society as a whole.

This interpretation of the Coase theorem has had two important consequences for the development of natural resource governance frameworks.⁷⁸ First, private economic agents have been expected to exert bottom-up pressure on governments to shape sector legislation and associated contracts and agreements towards the provision of more exclusive rights. In turn, this strengthens the incentives of private entrepreneurs to channel investments towards a more efficient exploitation of natural resource rents, from which governments will also benefit. Second, private economic agents are in general thought to be better suited to develop natural resources and exploit resource rents. This

⁷⁸ See Yalcintas (2013) for a discussion on the (mis-)interpretation of Coase’s original work and the subsequent lock-in of the ‘Coase theorem’. See also Ricketts (2014).

puts the right to exclude others from exploiting natural resource rents at the heart of sector legislation and associated contracts and agreements.

At least three bodies of work have supported these interpretations. The first includes an influential series of empirical studies conducted in the 1960s and 1970s on the development of native private land ownership in parts of Canada as well as early mining legislation in the American West (Demsetz 1967, Umbeck 1977, 1981, Libecap 1978). These studies provided the empirical basis for the hypothesis that economic actors who stand to benefit from more exclusive and more precisely defined property rights will mobilise to initiate regime change towards this end. Potential winners will engage in collective action and exercise political pressure to demand such rights. The initial triggers for such demand have been thought to be exogenous and are similar to the external factors highlighted in the introduction of this volume, including global geo-economic and geo-political power shifts, technological innovations and demographic and migratory pressures. As these factors lead to increases in the value of resources in the ground, it becomes worthwhile for potential winners to demand regime change and to exploit the new economic opportunities.

The empirical narrative goes that miners in the American Gold Rush were driven by such opportunities but were seriously hampered by contestation over claims of ownership. So they started to engage in collective action to develop localised practices that would help them to resolve their disputes. In the absence of a credible public authority stepping in to define and enforce rights, miners collaborated to develop localised mining regimes that assigned and enforced individuals' rights over extractive resources that had been explored and discovered. With the introduction of order into the initial scramble for mineral resources, local miners gained greater certainty. This in turn allowed them to become more efficient and benefit from increases in scale. Later on these local district mining

regimes were incorporated into US federal mining legislation (Libecap 1996). Some have considered this development the beginning of America's successful path of resource-based economic development (Wright and Czelusta 2007).

A second body of work has investigated the impact of the 'rule of law' on economic performance. Based on the policy conclusions derived from the apparent confirmation of the 'Coase theorem', a series of cross-country quantitative analyses have demonstrated that countries with stronger 'rule of law', i.e. better protection of property rights, outperform those with poorer governance indicators (Haggard et al 2008). Obviously, policy advisers have concluded from this research that countries seeking to boost economic growth by drawing on their natural resources wealth should first and foremost strengthen their sector legal frameworks.

The third body of work evolved around the postulate of the 'tragedy of the commons'. In 1968 Garrett Hardin suggested that when resources are owned in common rather than by private individuals, each user has an incentive to overexploit these resources for his/her personal gain (Hardin 1968). The result is unsustainable resource exploitation, which ultimately undermines the common interests of the community. Thus, ownership over natural resources should preferably be assigned (or licensed) to private economic agents, because they would balance their short-term and long-term interests and ensure that resources are exploited in a sustainable manner. This policy conclusion has also been used to argue that granting exclusive rights to private resource developers would be best for ensuring the sustainable exploitation of extractive natural resources (Daintith 2010b).⁷⁹

This reference to Hardin's postulate is rather surprising, for two reasons. The first is that Hardin has been challenged for confusing resources 'owned in common' with so called

⁷⁹ See page 5 and footnote 4 in Daintith (2010b).

‘open access’ regimes. However, the distinction between these two types of property rights regimes is critical with respect to conflicts between resource developers and rural and/or indigenous communities whose livelihoods and/or group identity depend on resources, which they own in common on the basis of traditional forms of governance. This includes grazing rights, rights to water, rights to cultural sites and other land user rights. For example, the Australian Native Title Act, referenced in Chapter 3 to explain the connections between the four levels of Williamson’s hierarchy, obliges resource developers to follow a process that establishes whether and what kinds of indigenous rights to resources exist in the geographic area for which a license has been obtained.

The second reason for surprise is that Hardin’s postulate not only referred to renewable resources, but it has also been overhauled. Since the 1960s extensive comparative empirical and theoretical research has been conducted showing clearly that there is not a single form of ownership that constitutes a *per se* first-best solution for sustainable resource management (Ostrom et al 2003). This research has confirmed that sustainable outcomes can be achieved, irrespective of who owns resources (i.e. irrespective of whether they are privately owned or owned by the state or by communities), and that there are always additional conditions that have to come into play (Ostrom 2005).

4.3.2 Critique of the liberal school

Although the liberal school of property rights has dominated, and continues to be dominant in policy advisory circles, several strands of research have picked up on its weaknesses. Its critics include, again, comparative economic historians and institutional economists but also lawyers concerned about how non-market institutions have supported economic development through encouraging local, national and international trade and finance (Moore 1967, Polanyi 1977/1944, North 1990, Olson 2000, Lachmann 2000, Williamson 2000, Acemoglu 2003, Acemoglu and Johnson 2005, Eggertsson 2005,

Evans 2007, Nicita and Pagano 2008, Acemoglu and Robinson 2012). Notably, among these critics are also proponents who have put forth structural explanations for variance in outcomes across producer countries (see Chapter 2).

The first weakness that critics have raised is that the liberal school makes the assumption that economic decisions and transactions are free of costs. This assumption is based on the ‘Coase theorem’, which has been recognised as a particular (mis-) interpretation of Ronald Coase’s 1960s article on ‘The Problem of Social Costs’. Yalcintas (2013) argues that Coase’s reference to the assumption of zero transaction costs was neither the central message of this article, nor was it an assumption that Coase wanted to convey as one that would serve economic enquiry.⁸⁰ In the real world, there are always transaction costs. These include, for example the costs associated with obtaining information, engaging in bargaining, and enforcing agreements. Contrary to the assumption of zero transaction costs, those who have investigated the broader historical and social foundations of capitalist market economies have highlighted the important role that social institutions play in helping economic agents to reduce and manage transaction costs. For example, they point out that social institutions coordinate behaviour, which in turn affects the risks that economic agents associate with the costs and the returns of their economic decisions. They also constrain economic agents in how they can manipulate and alter property rights to their advantage, at the potential detriment of broader social outcomes. Thus, social institutions are critical to how capitalist markets work (or don’t).

Related is the question how socially beneficial market institutions have evolved and why in many countries institutions have not evolved in socially beneficial ways. The argument

⁸⁰ Yalcintas makes the case that the ‘Coase Theorem’ has lived on and provided one of the bases of much of economic thinking since the late 1960s, because the positive epistemic costs of correcting the 1960s mis-interpretation of Coase’s real message have become too high. Since then, the theorem has served different strands of economic and legal thinking, despite the conflicting interpretations of its meaning. See also Nicita and Pagano (2008) and Ricketts (2014).

is that transaction costs advantage some economic agents over others to shape social institutions in their favour.

The second issue is that exclusive property rights cannot simply be secured by reforming sector-specific legislation and by signing contracts and agreements. The strength of such rights is underpinned by their legitimacy, which in turn is the 'outcome' of political processes taking place largely within the borders of sovereign nation-states. The critical function of legitimacy is to reduce the cost of enforcing property rights. The argument is that the legitimacy to grant exclusive rights requires a positive trade-off between the benefits and costs associated with the granting of such rights. A key factor affecting this cost-benefit trade-off is the extent to which citizens are able to challenge public authorities to deliver on the duties and responsibilities of sovereign nation-states vis-à-vis their citizens. For example, if governments, resource developers and third parties put in place broadly accepted measures that ensure that potential negative externalities are not simply off-loaded onto local communities and other economic sectors this reduces the likelihood of protests and other costly forms of discontent.⁸¹

The critics of the liberal school do not deny the importance of stable and secure property rights for positive investment decisions. They acknowledge that such rights are important for encouraging private companies to explore and produce oil, gas and mineral resources in countries with difficult political and economic environments. However, they stress that simply reforming a country's sector legal framework to pursue the narrow objective of attracting foreign investment is not enough to ward off and discredit potential domestic resentment against such reforms, nor is it enough to bring about economic development. This suggests that legal provisions to ascertain property rights are double-edged swords.

⁸¹ For resource developers this means that, although legal frameworks and contracts may appear to grant clear and defensible resource property rights on paper, it is only their legitimacy that supports enforcement. Where legitimacy is weak and informal rules are at odds with formal rights granted, coercion and force can be used for at least some time to maintain legal, fiscal and contract stability. This comes with costs, and if these costs are rising, governments come under pressure to reassess their stance.

Rights on paper do not build the political coalitions necessary to guarantee their stability over time. For example, this has become obvious in places such as Peru, where changes to property rights affecting the extractive resources sectors were enacted under exceptional economic and political circumstances with little attention paid to building broad-based coalitions supporting these changes (ICMM 2007a, 2013b).

Ultimately, by focusing only on a narrow set of benefits associated with granting exclusive property rights, the real costs associated with the provision of such rights have been ignored (Nicita and Pagano 2008, Katz and Owen 2009, Pistor 2002). Important political and social implications inevitably arise from how these costs are distributed. These can affect the relationship between governments and resource developers. For example, resource developers and industry observers have noticed that more governments designate responsibilities directly to resource developers. Such responsibilities are mandated in the form of social investments and/or setting increasingly stringent conditions around specific objectives such as local content and local employment targets, financing shared infrastructure or delivering subsidised resources to domestic markets.

To further identify what might lie behind such pressures, the next three sub-sections focus on three questions. These are (1) *what role do nation-states play in the provision of property rights*; (2) *what are the wider socio-economic benefits of providing property rights as a ‘public good’*; and (3) *how do elite constellations and pre-existing institutions affect the cost/benefit trade-offs of providing private property rights*.

4.3.2.1 Nation-states and the provision of property rights

The answer to the first question *what role do nation-states play in the provision of property rights* is the following: private companies can only enjoy exclusive rights over natural resources if some sort of collective entity absorbs and distributes the costs of defining and enforcing such rights for them. Nation-states play a critical role in defining,

guaranteeing and enforcing private property rights, irrespective of who initially owns extractive natural resources.

Philosophically, this answer is underpinned by the argument that nation-states hold a monopoly over the use of sovereign power. This gives them a comparative advantage over the provision of property rights. In exchange for more exclusive property rights, nation-states can impose duties and responsibilities on the beneficiaries to cover the costs associated with the provision of such rights, including administrative, political, social, and environmental costs. When private resource developers are granted rights to explore and develop extractive resources, they have to share part of the economic rents with the nation-state. This is usually called taxation, but may also involve other forms of revenue mobilisation. For example, in countries where tax administration is particularly weak revenue may be mobilised in-kind, such as Chinese companies building shared infrastructure in the Democratic Republic of Congo. In theory, countries and resource developers should both gain, as long as the wider socio-economic benefits derived from granting exclusive property rights outweigh the political, economic and social costs of defining and enforcing such rights.

A historical argument also supports this role of the nation-state. The argument goes that, in expanding their territorial reach across Europe, the ruling elites of emerging nation-states needed better access to capital, which prompted them to strengthen their power. Initially, sovereign power was exercised through the deployment of armies paid for by coercively taxing communities. But political elites learned to use their authority more effectively and collaboratively, by forging productive alliances with new economic elites. The development of mineral law in Europe is part of this story, whereby the principle of *'first come, first served'* reflected a mutually beneficial deal between political rulers and

free miners.⁸² Nation-states developed increasingly elaborate political-administrative systems to define and enforce exclusive resource property rights for eventual, though not immediate, expansion to broader constituencies. New economic elites created new value, thus giving the state greater access to capital and allowing it to expand its revenue base and eventually provide more public goods and services that further enhanced broader based economic opportunities (Tilly 1992, Lachmann 2000, Bates 2001, North et al 2009, Lichbach 2010, Tanzi 2011).

The development of district mining legislation in the American West provides an example of what happens in the absence of a collective political entity as represented by nation-states. The previous sub-section explained the view of liberal scholars that, in the absence of such a collective authority, local miners engaged in a process of bargaining and negotiating district mining legislation from the bottom-up. By adhering to the Coase theorem, they assumed that this process was free of transaction costs, or at least that transaction costs made no material difference. However, critics argue that, in the absence of an authoritative public entity, local miners faced a serious collective action problem to solve disputes over competing claims among themselves. To minimise transaction costs, the miners resorted to their shared knowledge of the European principle of *'first come, first served'* as a working practice for managing claims.

To test this hypothesis Clay and Wright (2003) investigated historical records on claim disputes and controversies and found that district mining legislation did not fully resolve conflicts around mining claims. Many incidences of dispossession, favouritism and cronyism in dispute resolution continued to occur even after the bottom-up negotiated district mining legislation had been developed. They conclude that the collective action of local miners did not lead to the development of a minerals regime that provided secure

⁸² This principle was first mentioned in chapter 3 as an example of a level 1 institution, and it will be discussed further in chapter 6.

titles. Adhering to the principle of *'first come, first served'* merely helped local miners to establish a system that helped them manage 'access' to claims. This constituted a marginal improvement to the preceding chaotic scramble. Property rights only become more secure with the further consolidation of the liberal American nation-state developing and enforcing sector legislation under the 1872 Federal Mining Act.

4.3.2.2 Property rights as a 'public good'

The answer to the second question *what are the wider socio-economic benefits of providing property rights as a 'public good'* is the following: nation-states support the creation of value and expand their revenue base, if they are able to define and enforce property rights more broadly than just for a narrow set of beneficiaries (De Soto 2000). By implication, the oil, gas and mining sectors are more likely to deliver wider socio-economic benefits, if such rights are also provided to other economic sectors as part of a comprehensive and consistent legal framework. In more theoretical terms, this is to say that nation-states ought to provide property rights as a 'public good'. This is the case when the protection and security of the rights of one economic agent does not negatively impact the protection and security granted to another economic agent and his/her rights. It is this aspect that matters most for countries providing strong 'rule of law' (Acemoglu and Johnson 2005, Hoff and Stiglitz 2005, Katz and Owen 2009). This suggests that when policy advice focused just on reforming legal frameworks specific to the oil, gas and mining sector, this advice was effectively based on a misinterpretation of the findings of comparative research on the impact of legal frameworks on economic development.

The fundamental challenge with public goods is that they tend to be undersupplied. This is because by definition they are 'non-rival' and 'non-excludable': everybody benefits from their existence but nobody wants to voluntarily pay for their provision. As game theory has shown, nation-states can address this collective action problem by deploying

their monopoly over the use of power. Using taxation they can compel beneficiaries to commensurately pay for the benefits they derive from the provision of exclusive property rights. Once the collective action problem is overcome, economic opportunities expand and more people can benefit. This is what characterises socially responsible market capitalism. This is of course also the empirical story for Europe, where domestic political pressure increased the costs for political elites providing monopoly rights to themselves and their aligned economic elites. The responses of political elites to the costs of rising pressure from new economic elites, as well as from organised labour and other broader-based social constituencies, was critical for maintaining political order and an overall positive trade-off.⁸³ However, this required a commensurately higher level of public benefits. In Europe, this development led to an expansion of administrative capacity to tax and a more broad-based provision of property rights. Thereafter came the transition away from coercive use of power to less person-focused and more rules-based systems of governance. Put together, it ultimately brought about a higher level of state financial and regulatory activities and also greater personal freedoms, while at the same time it scaled back the privileges political elites had previously enjoyed.

In countries with considerable oil, gas and mining reserves it is often the case that secure property rights are not provided as a public good. Political elites define and enforce exclusive rights only to a small constituency, so called '*clubs*' of beneficiaries, who generate the revenues that allow political elites to survive. Because the oil, gas and minerals industry can survive without extensive linkages to other domestic economic sectors, as long as production inputs can be imported from abroad, political elites can

⁸³ For the sake of complementarity, it should not be forgotten that when the fundamental shift from common property to private property set off in Europe, it initially only benefited a strong economic minority while also evoking considerable social costs upon others. This shift only supported broad-based economic progress when the political need to mitigate these social costs led to the introduction of social, educational and other public policies that are now a common feature across sophisticated capitalist economic systems (Alber 1982, Esping-Andersen 1999).

more easily get away with providing property rights as ‘club goods’ to a select group of resource developers.

A number of comparative case studies on resource-rich countries have used the ‘club goods’ hypothesis to show how narrow alliances between political and economic elites can limit the provision of secure property rights only to a select group of resource developers, who in turn generate sufficient financial and other benefits for political stability to be maintained (Haber et al 2003, Snyder 2006, Jones Luong and Weinthal 2010). The consequences are twofold. First, while narrow political-economic alliances do well, there are limited wider benefits for the economy and society as a whole. Second, while ‘club goods’ based political arrangements can remain stable for some time, they are destined to run into difficulties when the benefits become insufficient to counter domestic pressure building up to distribute benefits more widely and to compensate those who bear the negative consequences of the country’s overt reliance on an export-oriented resources sector.⁸⁴

When faced with growing domestic pressure, governments need to gain domestic strength. This can lead to at least two scenarios. First, governments can increase their use of coercive power to maintain the political status quo. The cost of this strategy depends on the relative strength of non-elite domestic constituencies. Second, governments can aim to increase their legitimacy and political strength by expanding the positive reach of the state apparatus to improve public policies and provide more inclusive economic opportunities. It is difficult to dismiss the pursuit of the second strategy as just another feature of ‘*resource nationalism*’. On both normative as well as analytical grounds, nation-states should not be undermined when they strive towards expanding the provision of property rights as a ‘public good’. It is, in fact, a distinctive feature of the liberal approach to international relations to establish and confirm international norms on the

⁸⁴ Consider previous footnote.

duties of nation-states vis-à-vis their citizens as a means to discourage national elites from pursuing the coercive route.⁸⁵ The challenge for resource developers is that this invariably means higher production costs, and therefore a loss of value as estimated on the basis of the *status quo*.

4.3.2.3 Trade-offs

The third question was *how do elite constellations and pre-existing institutions affect the cost/benefit trade-offs of providing private property rights*. The answer to this question is not straightforward. While nation-states play a critical role in defining, guaranteeing and enforcing private property rights, the provision of such rights is not cost free, nor does it automatically benefit everybody.

Nation-states are not monolithic entities. It would be rather unrealistic to assume that nation-states as collective entities can perfectly recognise all costs, ensuring that they collect a commensurate share of the resource rent that resource developers generate, and that they re-allocate the rent received to cover administrative costs and compensate the individuals, communities and other economic sectors that have been negatively impacted. In reality, the true costs are often difficult to recognise at an early stage. When they do arise later, some can more easily be socialised or off-loaded onto social groups that are too weak and/or too unorganised to avert this outcome. The presence of transaction costs makes it very likely that some agents are more privileged in capturing benefits, while others are disproportionately shouldering costs and may struggle to negotiate some form of compensation or benefit sharing.

Pre-existing institutions facilitate the strategic actions of different constituencies to manipulate trade-offs and to direct institutional changes towards serving their particular interests. Thus, negotiated changes to property rights do not necessarily need to present

⁸⁵ See Dannreuther (2013) for a discussion of the liberal approach to international relations.

an improvement, at least not for everybody. Yet, with its narrow focus on benefits the liberal school assumes that changes to property rights regimes towards more exclusivity always constitute an overall improvement. Crucially, this ignores the moral question about how much inequity in the distribution of benefits and costs a government can justify. Second, it ignores the economic question of at what point a skewed distribution of benefits and costs institutionalises unproductive *rent seeking* and other features of the ‘resource curse’ that undermines a country’s overall social and institutional capital.

This critique does not suggest that reforms driven by vested interests are inherently bad. It does, however, demand that an analytical lens be placed upon the issue and prompts more careful consideration of the domestic distribution of the costs and benefits, rather than just assuming overall positive outcomes. Shaping exclusive resource property rights regimes towards the interests of advantaged elites can serve a country well over the medium- to long-term, depending on the configuration of additional variables. It is these additional variables that the critics have sought to identify, by contrasting and comparing country cases.

One of the analytical concepts used to identify under what conditions a positive overall trade-off might occur is the ‘commitment problem’ (Olson 2000, Acemoglu 2003, Bates 2008). This problem is defined as the vicious circle where any government strong enough to arbitrate property rights is also strong enough to abrogate these rights. This means that the power of a nation-state capable of defining, enforcing and arbitrating property rights is not by itself sufficient to prevent the malign abrogation of these rights when this suits particular interests. Theoretical solutions to the commitment problem can reveal under what conditions abrogation might, or might not, take place.

An important line of enquiry has been whether, in comparison to unsuccessful cases, there are common configurations of critical variables across successful cases (Eifert et al

2003, Haber et al 2003, Snyder 2006). Comparative case studies summarised in Chapters 2 and 3 have shown that positive results are most likely when there are self-reinforcing bargains struck between political and economic elites as well as between these elite alliances and non-elites. This points to two critical relationships: the first is the relationship between political elites and the economic constituencies upon whom government depends for most of its revenues; the second is that between these elite alliances and wider socio-political interest groups upon whom the government relies for its broader legitimacy (but who might also influence the non-government economic elites). It would appear that the more critical relationship is the second one, where the elite alliances supporting the government that leads the nation-state as the collective entity granting and guaranteeing exclusive property rights over resources may, or may not, be exposed to wider constituencies putting pressure on how it grants such rights, imposes duties, absorbs costs, collects revenue, and reallocates expenditure to serve broader economic, political and social objectives. For an overall positive outcome, the critical factor appears to be achieving a mutually advantageous tripartite dynamic between political and economic elites, and their relationships with broader socio-economic interest groups. Exogenous shocks to domestic market conditions can affect this relationship in positive as well as negative ways, not least conditioned by whether resource developers decide to respond to public needs in a confrontational or a more collaborative manner.

4.4 Summary: in need of better theory

This chapter has asked *how do institutions change*. It has contrasted the liberal approach to institutional reforms against the wider social science literature that sees institutional change as the outcome of contingent processes bringing about profound transformations of the structures underpinning economic, political and social exchanges.

The liberal approach to institutional reforms has focused on putting in place measures that help to attract foreign investment. In this context, the reform of sector legal frameworks has been viewed as a crucial ‘input’ to encourage positive investment decisions. Policy advisors have prioritised the perceived need for stable property rights, based on the argument that resource developers invest in countries where they find sector legislation and fiscal terms to be most favourable (Onorato 1995, IBRD/ The World Bank 1996). The chapter has drawn on the concept of property rights to explain how the liberal school of property rights has provided the intellectual underpinning of this reform agenda. This school of thought has built its policy conclusions on the ‘Coase theorem’ and other arguments developed since the 1960s, suggesting that exclusive private property rights are key to successful resource sectors development. The liberal institutional reform thinking that emerged from the 1980s followed from there on.

The chapter has also argued that the various explanations for the observed mixed outcomes of the liberal institutional reforms have not been satisfactory, because they cannot explain the reform reversals and backtracking that have happened in some countries and the conflicts and tensions that have continued to persist, and in some cases increased, in others. Two of the four explanations, namely ‘*resource nationalism*’ and the ‘*obsolescing bargain*’, rely on pointing to conditions external to producer countries as the source of changes in the presumed bargaining relationship between resource developers and governments. Thus, there is no questioning of the liberal institutional reform agenda *per se*. The third explanation extends the liberal institutional reform agenda by emphasising ‘poor governance’ as the source of poor outcomes. This explanation bolts onto the liberal approach to institutional reforms the global agenda on the good governance of the sectors by asking for greater transparency in the hope that this will lead to greater accountability. Proponents implicitly apply the ‘Coase Theorem’ and therefore the rather simplistic logic that once more information is made available citizens will

demand additional institutional changes from their governments. Once these demands have been responded to, economic, political and social outcomes are expected to improve.

The fourth explanation builds on the *alternative perspective* discussed in relation to Figure 2 in Chapter 1. It draws on the insights gained from the institutional theories developed by economic historians and sociologists who have not *per se* subscribed to the conclusions derived from the ‘Coase theorem’ and its assumption that economic decisions and transactions are free of costs. This explanation stresses context-specific domestic dynamics, seeing these as potentially enforced by developments at the level of international energy and minerals markets, but not solely caused by these. It brings out the ambiguity that exists between institutional form and function, which has been well documented in the comparison of advanced capitalist economies. It also stresses that particular institutional forms, including exclusive private property rights, are not good *per se*, because they increase costs for some and reduce them for other constituencies. This renders it much more difficult to determine the substance of well-meant institutional reforms. At the same time it emphasises that the change processes and the steering of these in the right direction is critical. Setting this direction has to do with gaining the broad-based legitimacy of property rights regimes and thus, this incorporates a normative perspective on the role of the state vis-à-vis citizens, including the private sector and its shareholders.

The challenge of the fourth explanation is that it still remains conceptual and is not underpinned by a theory that specifies the causal directions of the relationships across the three levels covered by the *alternative perspective*: namely the evolution of global energy and mineral markets, the economic and wider public policy stances of producer countries, and the business strategies and practices of resource developers. Nevertheless, this

explanation makes three positive contributions. First, it points to the fallacy of the third explanation's top-down approach to institutional reforms captured by the conventional perspective set out in relation to Figure 2 of Chapter 1. Second, it stresses the multi-level and process-focused nature of transformational institutional change, where the domestic political arena of each producer country and its institutional path dependency takes centre stage. Third, it points to the positive role of the state to provide as 'public goods' the institutions that make markets work. This means balancing the provision of rights with the imposition and enforcement of duties, including paying a commensurate level of taxes and complying with continuously evolving legislation and regulation. How this balancing is to be achieved is primarily a question of the dynamics behind domestic decision making processes. It is not a question about how best to externally impose reform substances.

This positive role of the state that the critics of the liberal school of property rights highlight includes that the states provide a connection between the institutions at level 1 of Williamson's hierarchy and those at level 2, with respect to which conflicts and tensions over resources most often occur.⁸⁶ Meanwhile the liberal institutional reform agenda has focused on the intersections between levels 2 and 3 and between levels 3 and 4, respectively. The role of the state and public authorities vis-à-vis both citizens and resource developers is central to bridging the different levels across the international and sector legal regimes that underpin energy and minerals markets. Looking at the past, this role is reflected in how mineral and petroleum legal regimes have come about in particular country contexts. Looking forward, this role continues to evolve and the task to balance the domestic redistributive consequences that arise from the interests and

⁸⁶ As discussed in the previous chapters, among these issues are, for example, the conflicts and tensions arising around the local land use and cultural rights of indigenous peoples and traditional communities, which are not always formalised, and the formal rights granted to resources developers.

expectations of resource developers and citizens has becoming increasingly complex.⁸⁷ Thus, it is no longer enough to focus purposefully attempted institutional reforms only on particular sector institutions located at one, or perhaps two levels of Williamson's hierarchy. Transformational improvements to the ways in which countries manage their extractive resources sectors require commensurate institutional changes across the various levels at which social science analyses have been conducted. Not least, this is reconsidered in the revival of the debate on the use of industrial policy as a legitimate tool to link the extractive resources with other economic sectors.

Following this chapter's conclusion that there is need for developing a theory of institutional change that captures the conditions under which producer countries can (and cannot) transform the institutional structures that underpin economic, political and social exchanges in relation to their extractive resources sectors, the next chapter takes a closer look at the intersection between level 1 and level 2 institutions. It puts the focus on the capacity of nation-states to enforce institutions that support the sophisticated economic, political and social exchanges that underpin well-performing and socially responsible market economies.

⁸⁷ Tanzi (2011) discusses this challenge in more general terms.

5. How are institutions enforced?⁸⁸

This chapter turns to the question *how are institutions enforced*. Enforcement here means the administrative capacity of producer countries to follow through on public policy decisions and the institutions created by these. Thus, the question focuses on the state-society relations that play out at the intersection between the institutions at levels 1 and 2 of Williamson's hierarchy. At this intersection the role of the nation-state and its capacity to enforce institutions is crucial.

The premise is that broad-based development cannot happen, if governments and their state apparatuses are unable to enforce institutions that can support sophisticated economic, political and social exchanges over space and time (Herbst 2000, Whaites 2008). Failed states are a sad reminder of what can happen when nation-states are unable to exercise positive public authority over their territory and the people(s) that live within it. At the other end of the spectrum lie the well performing market economies of the OECD, where the public sector provides as a 'public good' the institutional arrangements that make markets work and allow their societies to enjoy a higher living standard. The preceding chapters have emphasised that the institutions underpinning the better performing market economies have come in different forms and, that therefore, policy recommendations cannot rely solely on comparing institutional forms. Instead, comparing institutions should be looked at from the perspective of the functions they provide.

One proposition is that the commonality across 'good institutions' rests with their legitimacy, which in turn supports acceptance and trust and thus compliance. Legitimacy is about the positive exercise of public authority that reduces the cost of enforcement because rules do not have to be policed. It is this authority that provides the basis for impersonal transactions over longer distances and longer time periods that are

⁸⁸ This chapter draws in part on Dietsche (2012), published in Hujo (2012).

characteristic for more sophisticated market economies and modern societies.

Against the background of this proposition, the issue is not, as often proposed, that politicians and bureaucrats are sufficiently kept in check by institutions that constrain them. What matters is to understand where the power of public authority comes from in the first place. This power arises at the intersection of level 1 and level 2 institutions.

However, rather than concentrate on the intersection of level 1 and level 2 institutions where this authority originates, the liberal reform agenda has focused on sector specific level 2 and level 3 institutions and the global agenda on the good governance of the resources sectors has also emphasised the need for level 2 institutions that can constrain politicians and bureaucrats. There is no denying that formal checks and balances on the exercise of public executive authority are important. However, their overt emphasis conceives the role of the state and its administrative apparatus from a negative perspective: the problem of state failure takes centre stage. However, if countries are actually unable to enforce legitimate rules that make markets work, this emphasis is insufficient. The challenge is one of simultaneous state and market failure. This challenge begs the question how, once the objective has been achieved that politicians and bureaucrats are constrained, they come out at the other end better equipped to exercise positive public authority in a way that ensures broad-based development. The liberal sector institutional reform and the global good governance agenda provide no answer to this question.

On the positive side, the good governance debate has at least moved on from the neo-conservative agenda that focused even more narrowly on democratic electoral processes to now emphasising ‘checks and balances’ (Collier and Hoeffler 2006). However, Fukuyama (2013) is critical of this reasoning. He maintains that if ‘governance’ is only

about institutions that constrain politicians and bureaucrats, this debate omits to understand where the positive power of nation-states (or their lack thereof) stems from.

At the source of the positive exercise of public authority lies the ability of governments and their state apparatuses to resolve distributional conflicts and tensions, including those around the generation and use of resource rents. Quadrant 3 of this thesis's conceptual framework matrix suggests that this ability entails that interdependent political-administrative processes can be steered towards the adoption of policies and rules that deliver broad-based development outcomes. For example, to improve the productive capacity of the domestic private sector requires the capacity to identify and support potentially viable industries and enterprises, but also to monitor their performance and, if the expected outputs are not materialising, to correct policies. Likewise, supporting social policies aimed at reducing poverty among particular social constituencies requires the capacity to raise revenue as well as to target public expenditure at where this problem is perceived to originate.

The role of the nation-state and its capacity to enforce public policies, and the rules and institutions created by these, moves the debate onto Quadrant 3. According to Hyden et al (2004), this is the space where scholars of public administration conduct enquiries about how multi-level public policy processes can be steered and controlled towards achieving desired results. These enquiries are not served by a negative governance debate on either the predatory behaviour of politicians and bureaucrats or the skewed political and social structural legacies that countries may have been left with. Rather, they look at how shifts in political coalitions may lead to institutional changes that support developmentally beneficial functions, such as the reduction of transaction costs and the levelling of information asymmetries. These functions should in turn support increased private sector activities that open up economic opportunities for broader segments of society. The

normative objective of scholars of public administration is to contribute to building more sophisticated and socially inclusive market economies.

5.1 State capacity

The literature on state capacity gives some insights into how nation-states develop and deploy the power to resolve distributive battles to support market economies, and what lies behind the successful enforcement of institutions and institutional change. Several proponents have identified the ‘developmental state’ as the key driver enforcing the economic, political and social transformations that have allowed countries to reach higher levels of development. Developmental states have been associated with the remarkable economic recovery of some Western European countries after the Second World War, along with Japan and the extraordinary economic successes of some East Asian countries (Ahrens 1998, Eichengreen 2007, Sindzingre 2007, Routley 2014). Broadly speaking, such states are characterised by strategic and successful interventions in some economic sectors that are prioritised over other spheres of public policy. There is therefore an obvious overlap with the rediscovered thinking about how to better integrate the extractive resources sectors with other economic sectors using industrial policy. In the detail, there are at least three views on what makes for a development state. These focus on (1) *bureaucratic efficiency*; (2) *the ability to mobilise revenue*; and (3) *social acceptance and legitimacy*.

5.1.1 Bureaucratic efficiency

A common approach is to conceptualise developmental states on the basis of the Weberian notion of a rational bureaucracy organised along impersonality, technocracy and hierarchy (Toye 2007, 2008). This approach emphasises the need of policymakers to have at hand an effective bureaucracy that can be deployed to resolve collective action

problems, level information asymmetries, reduce uncertainty and encourage positive collaboration (Bates 2001, 2008, Lange and Rueschemeyer 2005). Bureaucratic strength is seen as an instrument that uses the sovereign monopoly over power to tackle resistance from vested interest groups to create markets and industries. Hence, bureaucracies can address market imperfections and are utilised to guarantee property rights and allocate skills across a society (de Soto 2000, Khan 2002, North et al 2009). They back market economies by providing the types of institutional functions that are associated with good institutions. This view is at odds with the liberal reform objective to scale back the size of the state, even where bureaucracies capable of exercising positive public authority across the entire territory of the respective country had never been achieved.⁸⁹

Although an effective bureaucratic apparatus is important, others caution whether this is sufficient. Limits to executive powers are also needed to ensure that economic opportunities become widely accessible and, not least, that bureaucracies pursue good normative objectives. Oppressive political leaders can also use bureaucratic strength to coerce and to constrain people's political and economic freedoms.

How do limits to executive powers come about? There are two views that are not mutually exclusive. The first is that purported by the proponents of the global agenda on achieving greater transparency in the extractive resources sectors. This view suggests that limits should take the shape of 'checks and balances' built into a country's political-administrative system. The second view sees limits work in a subtler and less visible manner, through socio-political norms and expectations that define and enforce socially

⁸⁹ For example, Peru is an interesting case where a major push to extend the public sectors positive reach beyond urban centers occurred under the leftist military regime. Meanwhile, in the 1990s the reform mantra was to cut back on the size of the state and to introduce so-called islands of efficiency at the center. More recently this has left sub-national government entities at the provincial and municipal level woefully unprepared to manage substantially increased amounts of mining sector related revenues. They are receiving these revenues because of the political settlement introducing the decentralisation of political power, which was reached after the ousting of the liberal but corrupt President Fujimori in 2000. For a comparative analysis of variance in outcomes at the local level, see Crabtree (2014).

acceptable economic and political behaviour. With reference to Williamson's hierarchy, the first view seeks to introduce checks and balances at levels 2 and 3, whereas the second view sees limits come in at level 1 and operate downwards from there.

The challenging question is, what happens if the often more informal institutions that operate downwards from level 1 are inconsistent with externally introduced and supported institutions at levels 2 and 3? It is in these instances when conflicts and tensions arise at the intersection between level 1 and level 2. The role of developmental states is to deal with such situations by working both upward and downward to achieve greater consistency across the different levels. Those emphasising bureaucratic efficiency do not necessarily distinguish whether developmental states deal with such situations in a coercive or a more consensual manner. For example, the positive country case studies discussed in sub-section 3.2.2, and shown in Figure 11 in the space marked (v), provide analytical narratives about how such institutional consistency has been achieved.⁹⁰ Meanwhile, relatively successful producer countries with autocratic political regimes may serve as the example for a more coercive approach.⁹¹

5.1.2 The ability to mobilise revenue

The work of economic historians provides a view on the coercive versus collaborate approach to building state capacity in order to exercise positive public authority. They have linked the transformation of Europe to the ability of nation-states to mobilise resources through taxation (Tilly 1985, 1992, Levi 1988). As the backbone of state capacity they see the ability of a coercive sovereign power to collect taxes. The argument is that rulers first needed to build bureaucracies in the form of tax administrations to finance wars in order to defend their territories and acquire new ones. Only subsequently

⁹⁰ These are in particular the case studies on Botswana, Chile and Norway.

⁹¹ Consider, for example, Equatorial Guinea.

did the same bureaucratic structures also served them to expand the provision of public goods and services and introduce social policies.⁹² It is this second step that led to the transformation of Europe, where access to economic opportunities were broadened and living standards improved more generally over time (Di John and Putzel 2000). While rulers would first resort to raising revenue from the more easily taxable immobile assets such as land and minerals, their need for finance to engage in wars led them to broaden out taxation to mobile assets, including for example skills and trades. This required them not only to develop more sophisticated systems of record keeping, but also to forge a new social contract with the broadening base of taxpayers (Tilly 1992). This marked the beginning of the shift from coercive to collaborative authority, where an increasingly impersonal public sector would support rather than exploit value-adding economic activities for mutual gain. This support would consist of the provision of the physical and institutional infrastructure as well as the investments in human capital upon which increasingly more sophisticated market economies depend.

5.1.3 *Social acceptance and legitimacy*

A third perspective looks beyond effective bureaucracy and the ability to generate revenue. Proponents see the advantage of developmental state in their ability to balance the power of an efficient bureaucracy with social acceptance and legitimacy. The role of a developmental state is that of the provider of social order backed by acceptance and legitimacy.

UNRISD (2010) sees developmental states combining three types of capacities. The first is *extractive capacity*. It enables nation-states to mobilise resources for public and private investments. This capacity combines the Weberian notion of a rational state with the

⁹² Such public goods and services included for example investments in electrification and infrastructure developments, defendable private property rights, comprehensive access to primary and later secondary education etc.

revenue mobilisation function. Second, developmental states have *political capacity* that allows them to build coalitions and to achieve the political settlements necessary to act decisively in defining and implementing growth-enhancing and redistributive public policies. Third, *allocative capacity* allows developmental states to channel resources towards support for the productive sectors, but also to withhold resources from favoured sectors, if these fail to deliver on the expected economic and social results. In combination, these three capacities are thought to allow developmental states to credibly commit to the promises and threats that they make vis-à-vis private sector entrepreneurs. While selected entrepreneurs may be given lucrative opportunities, they are expected to conduct, and can successfully be held to account for conducting, their businesses in a manner that benefits not only them and their shareholders, but also the country and its society more generally (Sindzingre 2007, Eichengreen 2007).

5.2 Prospects

The obvious question that arises from the literature on state capacity is *what are their prospects for producer countries to develop these three capacities, namely bureaucratic efficiency, the ability to mobilise revenue, and social acceptance and legitimacy*.

A negative perspective often prevails. Those who believe in *rentier states*, and hard-wired institutional structures brought about by historical trajectories, point to the negative association between resources taxation and building state capacity that has been referred to above. They argue that the relative ease of taxing the production of immobile extractive resources gives the governments of producer countries easy access to a sufficient supply of revenue that undermines their administrative efforts to raise revenue from broadening the tax base (Karl 1997, Moore 2004, DiJohn 2007, Bräutigam et al 2008). Political and allocative capacity is expected to remain low, because the reliance on mineral revenues allows governments to neglect building state capacity. Meanwhile,

political and economic elites spend their efforts to seek their share of the relatively effortlessly available mineral rents.

The pessimists also draw on the historic postulate of no taxation without representation. By inversion, the argument put forth is that the absence of broad-based tax mobilisation allows producer countries to get away with little concern for political legitimacy and responsiveness to citizens' needs. Political elites remain unconstrained by broader based social constituencies over which they exercise sovereign powers. They put their efforts in maintaining the types of institutions that support only their own wellbeing. It is expected that citizens have relatively little leverage to influence how and on whom public funds are spent or to bargain for greater political freedom, at least as long as they can be controlled coercively because the cost to do so lies below the rents generated by the resources sectors.

Fortunately, the prospects for producer countries to develop developmental states do not need to be this negative. Arguably, the historical rationale for mobilizing revenue in order to defend territory against external invasion is less of an issue today as few countries find themselves in this situation. Instead, the need for territorial defence and the exercise of positive public authority would appear to come from within. At least some, and perhaps an increasing number of, producer countries are experiencing domestic pressures to deliver on broader-based developmental outcomes. At the same time, the use of coercion to control domestic discontent has become more expensive. The suggestion that governments can quell such pressure by paying off political contenders with benefits derived from extractive resources rents is surely a question of scale, relative to the level of revenue generated and the domestic political cost of repression and political survival, as well as potential international repercussions on the country's reputation.

In addition, it is an empirically untested hypothesis to suggest that the governments of producer countries are categorically relieved from the need to seek domestic legitimacy. Important differences between producer countries have been ignored, because producer countries have often been contrasted against countries that do not produce (or export) significant volumes of extractive resources. The actual trade-offs between using coercion versus legitimacy to exercise public authority are bound to vary across these countries, based on the revenue generated from the extractive resources sectors, the domestic political costs of lack of legitimacy, and the international repercussions on reputation.

The historical reference to European nation-state building may be ambiguous, but it nevertheless offers some insights. Initially, the social group benefiting from the expansion of public goods and services in return for paying taxes constituted a rather select group of men with property. These were the early industrialists fighting for greater economic opportunities against the established gentry and clergy. Hence, the historical lesson points to the political battles between groups of old political elites and new economic elites. Some see the subsequent positive consequences for the masses almost as a by-product, and they did not materialise without first accumulating considerable social costs. The history of the social conflicts and tensions of the 19th and early 20th century that led to the introduction of social policies, most significantly only after WWII, is not a pretty one. An important historical lesson would therefore appear to lie in seeking to shortcut the nasty side of economic, political and social transformation processes.

5.3 Summary: steering by using processes that enjoy legitimacy

This chapter has turned to the question how public policy decisions and the institutions they create are enforced, focusing on the role of the nation-state in bridging the intersection between level 1 institutions and those that lie below. Drawing on the

discussion on state capacity it has turned to developmental states as a key driver enforcing the economic, political and social transformations that, as per Chapter 4, constitute positive institutional change. Developmental states mobilise resources, build political coalitions around growth-enhancing and redistributive policies and channel resources to productive sectors.

Although some proponents suggest that producer countries are unlikely to feature developmental states, others believe the outlook need not be all that negative. They point to internal and external conditions that could lead to the reformulation of the social contract between old and new elites and their relationship to non-elites. For one, there are prospects for institutional change when the status quo becomes too costly to maintain and these costs are outweighed by the potential gains of shifting alliances. However, shifting alliances do not guarantee positive institutional change. Broad-based improvements in outcomes may only happen when political leaders are able to strike a new deal with contesters, using the power of the sovereign and its bureaucracy and public resources to deliver on human capacity building, greater labour productivity and the adoption of new technology. How such deals are brought about is less likely to be a matter of applying generic models. However, the gains are made from local processes of negotiation, trial and error aimed at dealing with issues of immediate concern in an innovative way (Routley 2014, p. 170). This is *'steering by using processes'*, as set out in Quadrant 3 of Figure 1.

The discussion on developmental states bears insights for the rediscovered debate on promoting industrial policy. For state interventions in the economy to be successful, they appear to require the backing of a social contract between political and economic elites that encourages the government and its state apparatus to open up economic opportunities to the wider public and that keeps potentially unproductive rent-seeking under control.

From the debate on state capacity and developmental states, further research could pick up two sets of questions. The first is to investigate whether there are systematic differences in the elite structures of comparable producer countries and how these might be affecting political bargaining around not only extractive resources rents, but also transformative institutional change.⁹³ The second set of questions is concerned with how third parties and their actions affect (or not) the bargaining between domestic elites. These parties include multinational corporations, international governmental organisations and NGOs. What collective role do these agents play in supporting (or undermining) positive institutional change?

The next chapter moves on to giving an overview of the different sector legal frameworks that exist across producer countries. This stocktake may provide a starting point for considering if systematic differences affect countries' ability to steer institutional reforms towards delivering the functions that underpin sophisticated and socially inclusive market economies.

⁹³ A potentially interesting entry point is the observation put forth by Collier and Venables (2010), that there is a threshold effect, i.e. when governance quality is already above a certain level natural resource can lead to further improvement.

6. Sector legal frameworks⁹⁴

This chapter contributes some tentative insights to the question *do existing institutions matter for the design of interventions aimed at improving institutions*. Acknowledging that it cannot answer this question, the chapter picks up on the focus on sector legal frameworks introduced in Chapter 4 to recalibrate the ignorance of the liberal institutional reform agenda vis-à-vis institutional legacies and path dependencies. Going a step further, Chapter 4 discussed the main schools of thought on property rights to illustrate how the liberal approach to institutional reforms built on the analyses located in Quadrant 1 to draw policy conclusions for those constituencies operating in Quadrant 4. Yet, the critics of the liberal approach have countered that there is no such *short cut route* to get from Quadrant 1 to Quadrant 4. Instead, there is the *longer route* via Quadrant 2 and Quadrant 3, which implies that sector legal frameworks are the outcome of domestic policy processes. Because sector legal frameworks formalise property rights and therefore provide a bridge between level 1 and level 2 institutions, taking a closer look at sector legal frameworks should hold some insights into the importance of the processes that stand behind the formulation of these frameworks in relation to their enforceability.

This chapter illustrates the variations in sector legal frameworks as well as some of the historical trajectories that exist across producer countries. If indeed the legacies and path dependencies behind existing institutions matter, it should be useful to recognise the potential patterns behind these variations. Little systematic comparative work on sector legal frameworks would appear to exist to date. However, there are a number of open questions. These include, for example, whether the legitimacy and/or the durability of such frameworks has been affected by how they have come about⁹⁵. Another question is

⁹⁴ This chapter draws in part on Dietsche (2013), published in Dannreuther and Ostrowski (2013).

⁹⁵ A possible hypothesis would be that countries that go through intense domestic processes formulating sector legislation are less likely to revert it, whereas countries who have adopted sector legislative models from elsewhere without going through such processes are more likely to backtrack from such legislation.

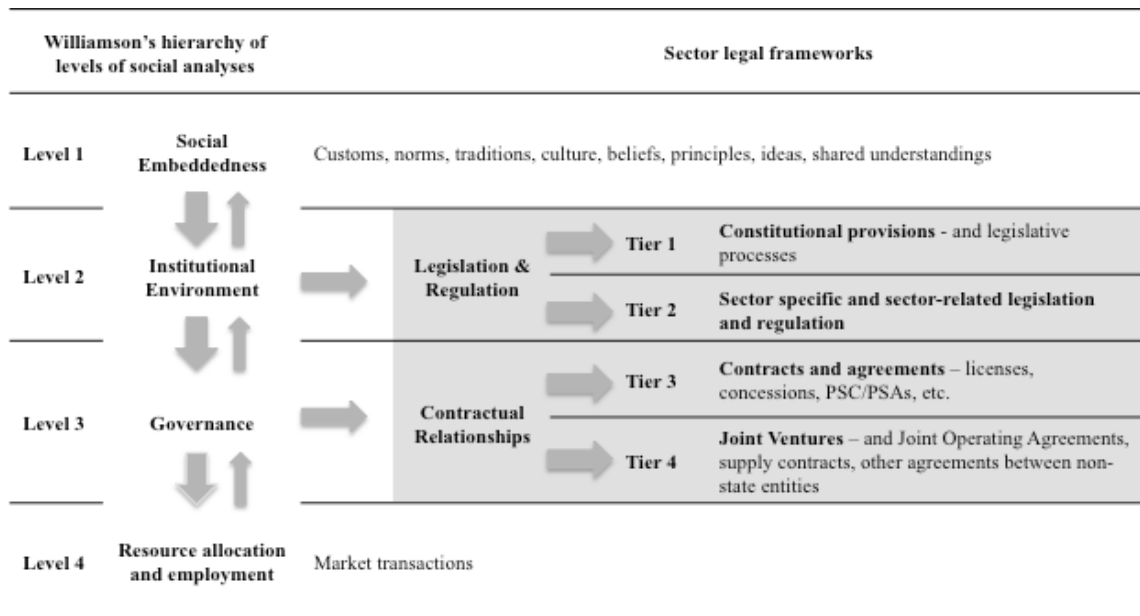
whether, how sector legal frameworks relate to wider public administrative systems, makes a difference to outcomes. A further question is whether similar forms of sector legal frameworks have delivered similar functions and therefore outcomes, and if not what the reasons for variances might be. The lack of attention paid to variations in sector legal frameworks in relation to the outcomes observed in producer countries is probably the result of the narrow focus of institutional reforms on the objective of attracting foreign investment and, more recently, on whether there is sufficient transparency in the contracts between resource developers and public authorities, and the processes by which the latter allocate rights to the former. It may not be straightforward to codify sector legal frameworks in a way that allows deploying a respective variable in cross-country statistical analyses. However, it would seem feasible to develop a dataset that could be used for systematic comparative analyses that apply other methodologies.⁹⁶

Figure 13 in Chapter 4 has already mapped the four tiers into the two appropriate levels of Williamson's hierarchy of social analyses. This figure is reproduced below for reference. The remainder of this chapter provides a cross-country comparative description of tiers 1, 2 and 3.⁹⁷

⁹⁶ See reference in section 3.3 (FN 56) to QCA and Fuzzy Set theory.

⁹⁷ The fourth tier is not discussed in greater detail, but it is worth pointing out that where an NOC/MNC is party to a resource developer consortium established, this can give rise to potential conflicts of interests. These entities may also represent the government in the signing of contracts and agreements. Therefore, NOC/MNCS can end up sitting on both sides of the negotiating table.

Figure 13 (reproduced): Property rights and sector legal frameworks



Source: author's figure.

Before identifying cross-country variations, it merits to recall briefly that in general sector legal frameworks share three objectives. These are: (i) to define the primary owner of extractive natural resource; (ii) to set out how exploration and production rights are to be granted and to whom; and (iii) to specify the conditions for the participation of private and state-owned enterprises in the exploration, development and production of these resources.

6.1 Constitutional provisions

Constitutional provisions in regards to extractive resources are the first tier of sector legal frameworks. Cross-country variances in constitutional provisions can be differentiated on the basis of three questions. These are (1) *who are the primary owners of extractive resources*; (2) *what is the legal tradition of the producer country*; and (3) *what are the origins and the trajectories of constitutional provisions*. Unsurprisingly, the answers to these questions typically relate to institutions located at level 1.

6.1.1 *Primary ownership of extractive resources*

The first question is *who are the primary owners of extractive resources*. The global norm is that extractive resources are usually owned by sovereign nation-states. The legal regimes that comply with this norm are referred to as *domanial regimes* (Omorogbe and Oniemoal 2010). However, there are at least three different types of such regimes, relating to how the respective nation-states had historically emerged. The first case comprises of countries where the primary resources owner is the state at the national level. The second case comprises of countries where sub-national state entities constitute the primary resources owners. For example, these may be regional states or provinces. Argentina is one such case. A third case comprises of countries where there is no primary resource owner *per se*, but particular state entities have a reserved constitutional right to grant administrative permissions that allocate ownership rights to private sector entities. For example, under the German federal constitution sub-soil natural resources are defined as '*bergfrei*' and neither belong to the freehold surface landowner nor to the state. Instead, administrative entities at the regional level can grant licenses and concessions to resource developers.

There are also a handful of exceptional cases to the global norm of *dominial regimes*. These countries grant primary ownership over extractive resources to surface land owners. The most important case is the United States, where on-shore sub-soil natural resources belong to private landowners.⁹⁸ How this and the other exceptional cases have come about is explained by the answer to the next question.⁹⁹

⁹⁸ Off shore sub-soil natural resources belong to the US government, who also owns a considerable amount of on-shore land, so called 'federal land'.

⁹⁹ The property right debate discussed in chapter 4 also provided background on this case.

6.1.2 *Legal traditions*

The second question to differentiate constitutional provisions is *what is the legal tradition of the producer country*. Legal traditions shape the process through which sector legislation can be developed. In civil law countries, the law-making role is reserved for the Legislature. Statutes are the primary sources of law. In contrast, in common law countries the decisions of judges on cases brought before the courts play an important role in shaping sector legislation. Judges acting under common law played a critical role in the early development of US petroleum legislation. When neighbouring landowners first started to enter into disputes over the exploitation of petroleum resources towards the late nineteenth century, the decisions of common law judges set off a path dependency that shaped subsequent court decisions. These enticed US private landowners to engage in competitive drilling, which in turn supported the rapid expansion of fossil fuels as a major source of energy in the US and elsewhere (Daintith 2010a, 2010b).

Faced with a new legal challenge, judges applied the so-called '*rule of capture*', whereby the landowner who first lawfully drilled and pumped fluid resources from an underground reservoir could also capture the resources located under his/her neighbour's land. This rule had originated in the European context around the capture of wild animals, but had also been applied to water pumped from underground aquifers (Scott 2008). Acting under common law, American judges simply went for this reference point located at level 1 of Williamson's hierarchy and applied the same rule to petroleum resources.

The unintended negative consequence of competitive drilling which the ruling of the American judges had triggered was quickly recognised by European governments. In the early decades of the twentieth century, they amended their sector legal frameworks to clarify that fluid sub-soil natural resources also belonged to the nation-state, in the same ways that hard minerals already did (Daintith 2010b). This sector legal change also

affected the colonial territories that European countries, in particular the United Kingdom and France, were still controlling at the time.

6.1.3 *Origins and reform trajectories*

The third differentiating question is *what are the origins and the trajectories of constitutional provisions*. Broadly speaking there are three groups of countries. The first group mainly comprises both the established European civil law and common law countries. The sector legal frameworks of these countries show path dependencies that have originated in their historic nation-state formation processes, where ruling elites expanded and asserted monopoly rights over the use of power to control territory and people and in the process had to sophisticate their public administrations (Bates 2001, North et al 2009).

Economic historians point to resource-based regalia or tax farming systems as a cost effective way for collecting revenue to sustain increasingly larger political and administrative entities that could gain and maintain control over territory and raise capital, not least to finance territorial wars (Tilly 1985, 1992, Levi 1989).¹⁰⁰ Developing minerals provided ruling elites with revenue. As there was little knowledge about existing deposits, sovereign rulers also needed to encourage miners to prospect and discover. This led to the development of the ‘*rule of discovery*’ and the principle of ‘*first come, first served*’¹⁰¹, whereby the miner who first staked a claim could also claim ownership over the resources discovered and produced (Scott 2008, Bastida 2004).

The second group comprises of countries that gained independence in the nineteenth and the early twentieth century. This includes North American and Latin American countries,

¹⁰⁰ Note the overlap with the three views on ‘developmental states’ discussed in chapter 5.

¹⁰¹ Note that the principle of ‘*first come, first served*’ was first introduced in chapter 3 as an example of a level 1 institutions, and it was also discussed in chapter 4 in the context of the debate on resource property rights.

and countries in the Middle East and Eastern Europe which emerged from the breakup of the Ottoman and the Austro-Hungarian Empire. Many of these countries inherited the legal traditions and sector legislation from their colonial mother countries. Subsequently, sector legislation evolved along somewhat diverging paths shaped by each country's specific post-independence political and social history. While there are of course path dependencies, countries with similar backgrounds can also show considerable variations that evolved in the decades after these countries became independent. For example, legislative frameworks now differ considerably across Latin America, despite these countries' common Hispanic civil law roots.

The third group comprises countries that gained independence from the middle of the twentieth century, who typically inherited basic sector legal frameworks in the transition from colonial rule. Many of these countries share the experience of undertaking sector legislative reforms from the late 1980s onwards, influenced by the thinking that underpinned the era of liberal capitalism. Another feature that can be found among these countries is that the second and the third tier of the sector legal framework are sometimes not clearly distinguishable. In the absence of more fully developed sector legislative frameworks, contracts and agreements have been rubber stamped by parliamentary approval so as to lend them the same status as sector legislation. Some have argued that this has made it more difficult for countries to improve and develop more comprehensive sector legislation (Campbell 2004).

Another serious issue affecting these countries is tensions and disputes around the formal exploration and production rights that have been granted to mostly multinational resource developers and informal land rights and land use practices usually associated with traditional forms of social and political organisation. The latter typically involve rural pastoral and subsistence farming communities, and/or internationally recognised

indigenous peoples. However, this issue has also been a source of conflict in former colonies that gained independence before the 1950s and 1960s, for example in Latin America, Australia and Canada, where there are significant and/or recognised populations of indigenous peoples and traditional communities.¹⁰²

To conclude this section, table 2 presents a summary of the comparative differences in constitutional provisions.

Table 2: Comparative differences in constitutional provisions

Tier 1- Constitutional provisions	<i>Who is the primary resource owner?</i>	Surface landowner (e.g. US onshore, some Canadian states, other legacy cases such as Trinidadian onshore blocs)
		Nation-state (e.g. Continental Europe and other countries with domanial regimes)
	<i>What is the country's legal tradition?</i>	Common Law (e.g. UK, USA, Australia, New Zealand, other former British Colonies)
		Civil law countries (e.g. Continental Europe)
		Other legal traditions
	<i>What are the origins and trajectories of constitutional provisions?</i>	Historically evolved (e.g. Continental Europe, some part of Eurasia)
		Initially inherited from mother country in 18 th /19 th /early 20 th century, since then evolved
		Inherited from mother country in 1950s/1960s, fundamental reforms undertaken in 1980s/1990s

Source: author's table.

6.2 Sector specific legislation

Moving on to the second tier of sector legal frameworks comprised within level 2 of Williamson's hierarchy, this section looks at variations in sector specific legislation. Sector legislation typically comes in the form of a mining law and/or a petroleum or

¹⁰² As discussed in sub-section 3.1.5, the trend here has been to create additional legislation formalizing the rights of these peoples and communities, including outsourcing the responsibility to establish the basis of these rights to resource developers.

hydrocarbon law. Complementing constitutional provisions, sector legislation further defines who holds primary ownership over subsoil resources. It specifies the authority that can grant exploration and production rights, and it sets out more specifically the rights, obligations, limitations and conditions for maintaining and cancelling these rights. Sector legislation also specifies the rules and procedures for accessing land, the use of other resources in the extraction process (e.g. water) and for developing infrastructure. It sets out the general terms and conditions for the subordinate use of contracts and agreements and may further define the use, management and control over the rents derived from resource exploitation.

Furthermore, sector legislation establishes the administrative framework for granting resource property rights in the form of concessions, licenses, leases, or whatever other term is used in respective jurisdictions. It defines under what conditions exploration or extraction may take place, and may set out a fiscal regime. In some countries, sector legislation tasks a national oil or mining company to look after the country's extractive resources on behalf of the nation-state. It may specify if rights are to be granted by a sector ministry, a national oil or mining company, or some other regulatory body. It may indeed be a national oil or mining company that grant exploration and production rights to resource developers, while at the same time the same company could be part of a resource developer consortium.

Again, there are three questions by which to identify variations across sector specific legislation. These are (1) *how general or specific is sector legislation*; (2) *how are resource property rights granted*, and (3) *what is the role that sector legislation assigns to NOCs and NMCs*. This time answers vary across the two sub-sectors, oil and gas versus mining.

6.2.1 *Generality versus specificity*

The first question is *how general or specific is sector legislation*. In general, oil and gas sector legislation tends to be more general and less specific. A country's hydrocarbon or petroleum law may refer details to tier 3 of the sector legal framework, and thus also to level 3 of Williamson's hierarchy. For example, it may support the use of standardised model contracts and agreements. Such models set out variables that can be altered, depending on the type and the conditions of the acreage in question. Consequently, there are many different oil and gas sector contracts and agreements and it is also quite common for countries to use various different types of contracts and agreements in parallel, each containing project-specific fiscal terms (UNCTAD 2007: table IV.3).

Mining legislation is more diverse, but also more specific. This is because mineral resources include a wide range of high value/low volume minerals such as diamonds and gold, metalliferous ores, non-ferrous metals, crude minerals and energy minerals. Often the mining law, which may also be referred to as a mining code, act or statutes, sets out classifications for different types of minerals and associates different mineral regimes with these. For example, at times large-scale mining projects have been provided with specific sets of regulatory provisions and guarantees. Small-scale and artisanal mining is often governed by a specific set of statutes. The energy minerals coal and uranium are usually subject to very specific mineral regimes and contractual practices. Moreover, geographic areas where the presence of mineral resources is already well known may also be subject to special regimes. The mining law may also set out a variety of provisions respective to taxes, customs, environmental standards and investment incentives.

6.2.2 *Granting rights*

The second question is *how are resource property rights granted*. Sector legislation usually sets out the regime for granting extractive resources rights, through licenses,

concessions or leases, or whatever the term used in the respective jurisdiction. This is the first step in the process whereby the primary resource owner shares with, or transfers rights to, a resource developer or a consortium of resource developers. Rights are usually awarded for defined stages of the resource development process, including for example exploration licenses, appraisal licenses and production licenses. These rights come with pre-defined limitations, such as the time period for which they are valid (duration), the specific work programme that has to be completed within this time period, the ability to sell or transfer them (transferability), the possibility to divide the license (divisibility), as well as other conditions that affect the exclusivity, flexibility and the quality of title associated with these rights (Scott 2008).

The most commonly used method for granting resource companies rights to explore and produce mineral resources is the familiar principle of *'first come, first served'*. It stipulates that resource developers are granted monopoly rights to explore and produce resources by the order in which their applications have been received. As would be expected, this principle has again originated at level 1 of Williamson's hierarchy. It can be traced as far back as the Roman Empire and the practice of 'free mining' in medieval Europe, where it evolved against the background of rulers providing incentives for prospecting and discovery when demand for minerals was rising but little was known about geological prospects. The principle has been strengthened in recent mining sector reforms, in particular with respect to developing countries where there is still comparatively little known about the resources that may exist underground (Bastida 2006, 2008).

In the oil and gas sector, the systems granting resource property rights are usually not based on the principle of *'first come, first served'*. Licenses can be awarded in a number of different ways and forms, sometimes used in parallel and decided upon on the basis of

the knowledge the primary resource owner possesses about particular acreage and its associated geological conditions. There is a typical distinction between two types of oil and gas licensing systems (Tordo et al 2010, Cramton 2007). Open-door systems award licenses as a result of negotiations between the primary resource owner and the interested resource developer. Resource developers are either explicitly invited to express their interest in a specific geographical area, or can take their own initiative to approach the primary resource owner.

Second, organised licensing rounds are based on administrative procedures where applications are evaluated against specific criteria set out up front. Such criteria include, for example, the proposed work programme for exploration. Licensing rounds can be organised as auctions, where licenses are awarded to the highest bidder. Different countries use more or less rigid mechanisms to evaluate the proposed work programmes and bids. Some countries determine up front the fiscal and other elements that the proposals of applicants are expected to include. Others may leave all the parameters open. Countries may also vary these conditions depending on the type of acreage they offer.

Bidding is less common in the mining sector. It is typically only used where geological prospects are well known, or they have been reasonably well established. The *'first come, first served'* principle is then replaced by some form of competitive bidding that puts the burden on potential resource developers to submit competitive assessments on the value of the respective geographical area. This practice is considered appropriate where national geological services have developed extensive minerals cadastres, or where national geological services or former state mining companies have established the resource base. Some recent mining sector initiatives have shown increased interest in enhancing geological knowledge to identify prospective areas that are suitable for the use of a bidding process (UNECA 2011).

6.2.3 Role assigned to national companies

The third differentiating question is *what is the role that sector legislation assigns to NOCs or NMCs*. Some countries vest resource property rights in NOCs or NMCs on behalf of the nation-state. Where they are fully owned by the nation-state, these companies may be granted preferred or even exclusive access to licenses and they may also be charged with the responsibility to oversee and manage the sector. Respective NOCs and NMCs will collaborate with private sector resource companies, if and when they require the latter's particular technological expertise and other business assets. Examples include most of the Middle Eastern NOCs, PDVSA of Venezuela and Pemex of Mexico.

The role of the NOC/NMC is sometimes associated with ensuring that government can exercise direct control over the sector. However, technocrats dispute this claim. They contain that similar levels of control can be achieved with both direct and indirect policy tools, where the latter involve applying different forms of state participation and regulatory oversight (Daniels 1995, Stevens 2003, McPherson 2009). Over the past decades a number of OECD countries have massively scaled back the role of NOCs/NMCs without generating the perception that their governments have lost control. Furthermore, NOCs/MNCs have been associated with two challenges. First, they may be left to manage a rather complex and often conflicting set of interests and tasks. For example, in addition to acting as *de facto* primary resource owner setting the terms and conditions for granting exploration and production rights to resource developer companies, they may also be part of a resource developer consortium and thus be a business partner to the very same companies. Second, NOCs/NMCs may encourage the problem of domestic elites engaging in unproductive rent-seeking rather than re-investing profits from resource rents into the sector and the national economy more generally.

NOCs are very prevalent in the oil and gas sector (Victor et al 2012). They control the majority of world's petroleum reserves, not least because of the particularly strong positions they hold in the Middle East (Marcel 2006). According to Stevens (2013), this is different from the situation that prevailed until the 1960s, when the majority of petroleum reserves were still under the direct control of a small number of private companies. The power of NOCs is more varied across Latin America and Asia depending on the respective country's economic policy stance. NOCs also exist throughout Sub-Saharan Africa, again with varying degrees of effective power, conditioned not least by the maturity of the respective countries' oil and gas sector.

NOCs have generally gained strength in countries outside the OECD, including in some that followed the liberal reform model in the early 1990s. For example, Kazakhstan has since revised its sector policies and re-established an NOC (Jones Luong and Weinthal 2010). In other countries, for example Brazil where Petrobras was partly privatised, the lines have remained blurred between the NOC operating like any other international private oil and gas companies and it being called upon as an instrument for meeting government objectives (de Oliveira 2012).

In contrast, there exist only a few NMCs after most were privatised in the 1980s and early 1990s. Governments rely more on indirect instruments that the sector ministry and/or a regulatory body apply to control the sector. Those NMCs that still exist tend to operate under special legal arrangements, for example the joint venture agreements between DeBeers and Debswana and Namdeb, or the mineral arrangements in place with Gecamines in the DRC. Chile's Codelco and Sweden's LKAB are further examples of the few surviving NMCs. However, some countries have recently re-established NMCs, for example Namibia, South Africa and Indonesia. This suggests that new types of sector legal arrangements might emerge in future in this context. An interesting observation is

also that among the more successful mining countries are those that have retained NMCs, including Chile, Botswana and Namibia.

Concluding this section, table 3 summarises the comparative differences in sector legislation.

Table 3: Comparative differences in Sector Legislation

Tier 2-Sector Legislation	<i>How general or specific is sector legislation?</i>	Oil and gas legislation is more general and less specific. It often makes use of standardized model Contracts and Agreements.
		Mining legislation is more diverse and more specific.
	<i>How are resource property rights granted?</i>	In the oil and gas sector rights are awarded in a number of different ways, including open-door systems and organized licensing rounds, based on administrative procedures or auctions.
		In minerals sector the most commonly used method is the 'first come, first serve' principle.
	<i>What role is assigned to NOCs/NMCs?</i>	Many OECD countries have privatized their NOCs. But NOCs have remained particularly strong in the Middle East; they control the majority of the world's petroleum reserves. The strength of NOCs is more varied in other parts of the world.
		In the minerals sector, few NMCs still exist. They usually operate under special legal arrangements.

Source: Author's table.

6.3 Contracts and agreements

The third tier of sector legal frameworks comprises of contracts and agreements. Located at level 3 of Williamson's hierarchy, contracts and agreements define the relationship between the primary resource owner and resource developers. Resource developers often consist of a consortium of two or more companies. Such consortia can include private extractive companies as well as NOCs or NMCs.¹⁰³ Contracts and agreements include licenses and leases, concession and/or license agreements, joint venture agreements

¹⁰³ The sector specific literature usually refers to the resource developer consortium as the 'contractor', 'licence holder', or the 'concessionaire'. Often, there is no distinction made between the resource developer taking resources out of the ground and investors providing funding to undertake this economic activity. Both are interchangeably referred to as 'the investor'.

between NOCs/NMCs and private sector companies, production sharing contracts/agreements, service agreements, various forms of mining agreements, and other country-specific types of contracts and agreements. Agreements and contracts also set out the applicable fiscal terms, where these have not been covered by sector legislation.

6.3.1 *Oil and gas sectors*

There is an extensive literature on contracts and agreements, most of which refers to the oil and gas sectors. This literature draws a typical distinction between concessions and so-called contractual regimes (Tordo 2007, Johnston 2007, UNCTAD 2007). The legal difference between these two types of regimes rests with the exclusivity of the rights granted to private sector resource developers. Concessions assign rights to the license holder (or ‘concessionaire’) when the resources are still in the ground. The old-style concessions of the early days of oil and gas sectors granted exclusive rights over vast geographical areas with long durations, had few duties attached, and typically paid the primary resource owner only a small royalty. Modern concessions are much tougher and less exclusive, and their associated fiscal regimes usually not only include royalty, but also various profit and value-based taxes, fees and charges.

Contractual regimes include both production sharing contracts/agreements (PSCs/PSAs) and service agreement (SAs). The nation-state, or the NOC as its agent, retains ownership over the reserves in the ground and the resources as these are produced. Rights to the resources produced are shared only once the resource developer has already been compensated for the costs incurred for bringing the resources out of the ground. Sharing happens either in the form of sharing production in-kind, or by paying private sector resource companies a premium fee for the extraction services they have rendered. Negotiating contracts revolve around, amongst other issues, the respective shares by which production is to be shared.

Contractual regimes are found mainly in the oil and gas sector, where they have been introduced from the 1970s onwards against the background of the negative experiences with early petroleum concessions. Over the past decades the use of contractual regimes has expanded considerably and they now dominate among the different types of petroleum fiscal regimes used. The more recent and emerging oil and gas countries tend to make use of PSCs, while Middle Eastern and other countries with strong and competent NOCs favour service agreements.

More generally, in many countries outside the OECD it is quite usual to encounter a situation where, under the umbrella of generic petroleum legislation, various generations of concessions, production sharing contracts and service agreements are used in parallel. Some argue that this situation might be negatively affecting the efficiency with which countries are able to govern the sector as a whole (UNCTAD 2007). It could indeed make the challenge of enforcement, discussed in Chapter 5, more difficult.

Another concern is that stabilisation clauses used in association with contractual regimes limit the ability of host countries to develop their sector legislation and apply regulatory and fiscal updates to existing contracts and agreements (Cotula 2008). In contrast, European and most other OECD countries generally prefer to use concessions. Concessions allow countries to evolve regulatory, fiscal and other relevant policy regimes, such as for example environmental legislation, without the need to change contracts and agreements. The governments of OECD countries are keen to retain the policy space and flexibility to expand or constrain the rights and duties of license holders within the context of overall economic, financial and public policies. It could be conjectured that this has to do with the issue of legitimacy and enforcement that was discussed in Chapter 5.

6.3.2 *Mining sector*

Concessions continue to dominate in the minerals sector. PSCs are very rarely used, and in the few cases where they are used they involve low value/high volume and easily marketable minerals such as sand and gravel. The usual explanation for this is the greater diversity of mining products and the more specific marketability. However, some industry observers argue that the marketability argument no longer holds, because many minerals are now traded transparently on commodity exchanges. In general, there has not been much discussion or research into this issue. In those few cases where NMCs still exist, service agreements and joint venture agreements are usually applied.

Alongside mining concessions, widespread use has also been made of so-called ‘mining agreements’, particularly in countries where more fully developed sector legislation was still missing in the 1980s and 1990s. These agreements have complemented sector legislation, and in some instances have been subjected to legislative ratification so as to lend them the same status as sector legislation. While the first so-called mineral development agreements emerged in the 1960s and 1970s with wide discretionary powers for government authorities, the trend from the late 1980s onwards has been for mining agreements to limit the scope and possibility for government discretion and to hold constant the parameters upon which resource developers have based their investment decisions. Modern mining agreements also refer to international arbitration to address potential investment disputes.

Modern mining agreements have been an important component of liberal thinking seeking to attract foreign investment into countries emerging from periods of conflict and economic crises. This rationale has been particularly relevant in the Sub-Saharan African context, where mining agreements have supplemented sector legislation in the form of so-called investment agreements or investment promotion agreements (Bastida 2008). These

agreements have often been explicitly designed to fill investment-critical gaps in general sector legislation. They set out the basis for determining the obligations of private sector resource developers, respective tax and other revenue payments as well as equity participation, and have often also offered extensive benefits and tax allowances to render the fiscal regime more investor friendly. They have catered to the needs of large-scale international mining investments during a period of time when the sector was suffering from a negative image respective its profitability.

There are also some differences in the use of mining agreements across Francophone and Anglophone Sub-Saharan African countries. In Francophone countries, the so-called *convention minière* is commonly used to define the general legal framework applicable to a specific project in addition to the mining license acquired under general mining law. For example, this is the case in Guinea, Mauritania, Niger, the Central African Republic and Senegal. The general mining law may include a model mining convention, on the basis of which a particular agreement is bilaterally negotiated between the government and the investor. Once agreed upon, an agreement may be subjected to ratification by the legislature. Agreements have typically also included extensive investment guarantees.

In contrast to the widespread use of mining agreements in Sub-Saharan African countries, industrialised countries rely on unilaterally specified mining concessions to grant private sector mining companies access to mineral rights. These also specify the fiscal terms. The only exception is Western Australia, where large export-oriented projects and this state's heavy dependence on mining have required significant associated investments in infrastructure. In Latin America most countries also rely on concessions that are granted under national mining law.¹⁰⁴ Concessions are typically granted on the basis of a non-

¹⁰⁴ An exception is Columbia where a concession is a contract (categorised as an 'adhesion contract'). Recent modifications to the Colombian mining code entitle the state to reserve areas for large-scale mining and to grant them to private parties under a 'concession contract', similar to the type of agreement used in the oil and gas sector.

negotiated, non-discretionary procedure allocating ownership rights by way of applying the principle of *'first come, first served'*. Exceptions include cases where rights are held by former NMCs that have been privatised, or where known and studied deposits are still owned by NMCs. For other parts of the world there is less generic knowledge about mining regimes. In Russia, most Central Asian FSU republics and other Asian countries, sector legislation and associated mining agreements and contracts are particularly varied and idiosyncratic.

Finally, table 4 summarises the broad differences across the sub-sectors and across regions.

Table 4: Sector and regional differences in the use of contracts and agreements

Tier 3 – Contracts and Agreements	<i>Oil and gas sector</i>	Contractual regimes constitute the majority of petroleum fiscal regimes (i.e. production sharing contracts and service agreements). They are widely used by countries outside the OECD.
		Concessions are used by most OECD countries. Their advantage is that sector policy can be evolved without the need to change contracts and agreements.
	<i>Minerals sector</i>	Concession are the norm.
		Particularly in Sub-Saharan Africa, mining agreements have been used in conjunction with concessions, often to fill investment-critical gaps in general sector legislation.
		Where they still exists, NMCs may use service agreements, or collaborate with private resource developers under joint venture agreements.
		PSCs are extremely rarely used.

Source: author's table.

6.5 Summary: paying attention to legacies and path dependencies

This chapter has set out from the question *do existing institutions matter for the design of interventions aimed at improving institutions*. Acknowledging that it could not answer

this question, the chapter picked up on the focus on sector legal frameworks introduced in Chapter 4 to provide a starting point to recalibrate the ignorance of the liberal institutional reform agenda vis-à-vis institutional legacies and path dependencies versus the determinism with which proponents of structural institutional analyses have looked at these.

The chapter has set out in broad terms the historical trajectories that have shaped the relationship between primary resource owners and resource developers across producer countries and across the oil and gas and minerals sectors. It has also identified differences between the longer established and more consolidated countries, including mostly European as well as other OECD countries, and other countries, in particular those that gained independence only in the middle of the twentieth century. The chapter has observed that for the first set of countries, sector legal frameworks have evolved as part of the processes building and consolidating nation-states. For this set of countries, namely OECD countries, sector legal frameworks have evolved most along the lines of the process-focus set out by Quadrant 2 of the conceptual framework matrix. Accordingly, it would be expected that for these countries the potential for fundamental conflicts and tensions arising at the intersection of level 1 and level 2 institutions would be most contained. There are, in general, legitimate political-administrative processes in place by which public entities can resolve and/or manage conflicts of interests, for or against the interests of resource developers. For example, where the rights of indigenous peoples are affected by extractive resources projects, legislative and regulatory bases and administrative procedures have been put in place respective how resource developers are expected to respond to approach and deal with such rights.

The situation could be quite different in those producer countries, where sector legislative frameworks intersect less smoothly with the (often not formally recognised) social

institutions that exist at level 1. In these instances, it would appear that a combination of domestic factors and external factors has triggered, and will continue, to trigger contentious changes in sector legislative frameworks. The more extreme cases, such as Bolivia, immediately come to mind.

In many non-OECD countries, sector legal and other administrative frameworks have been shaped by external factors, starting with the institutional heritages countries were left with at the time of their independence. This was then followed by the political and economic ideas that have dominated in the respective post-independence eras. The reform thinking that followed from the 1980s onwards focused on the specific objective of encouraging foreign investment and, more recently, there has been the focus on transparency around contracts and revenue flows, as well as the allocation of exploration and production rights to resource developers.

Still, little attention is being given to idiosyncratic internal factors, for example the perseverance of traditional forms of governance among communities and peoples whose livelihoods are impacted by the extractive resources sectors, or to the economic, political and social transformational challenges faced by governments and public entities in the context of poorly evolved state-administrative capacities. With respect to conceptual framework matrix set out in Figures 1, 4 and 7, the *longer route* from Quadrant 1, via Quadrant 2 and Quadrant 3, to Quadrant 4, suggests that more attention needs to be paid to these internal factors. The *alternative perspective* set out in Figure 2 suggests that, conceptually, these factors work both upwards and downwards, respectively affecting global energy and mineral markets and the business sustainability of resource producers. How they do so remains to be deliberated by new theory developments.

With Chapters 2 to 6 now having provided the substance to respond to the three high-level questions that the thesis set out in section 1.5, Chapter 7 moves on to answering

these. To recall, these questions were: *(1) how have policy conclusions on resource governance come about and how has this influenced the global agenda; (2) how do proponents of the global agenda associate resource sector governance with the complexity of, and the challenges posed by institutional analyses, and (3) what are the strengths and weaknesses of the existing scholarship and what do these imply.*

7. The argument

This thesis has presented a critical analysis of the global debate on the ‘good governance’ of the extractive resources sectors. Over the past decade this debate has seen a remarkable elevation, where the associated action agenda has received endorsement at the international non-governmental and the inter-governmental level. At the same time, the broader social science literature has subjected the governance concept to scrutiny, critiquing that governance has been defined in several ways and has meant different things to different constituencies. Several concerns have been raised, including that reforms introduced under the wider ‘good governance’ agenda have supported *institutional mono-cropping* and *mono-tasking*; that they have overemphasised the need to constrain politicians and bureaucrats; and that too little has been done to support countries in building the administrative capacity required to provide public goods and services on a broader basis.

These concerns suggest that the narrative of ‘good’ versus ‘poor’ governance provides a poor basis for advocating and designing reforms, including those targeted at the extractive resources sectors. Thus, the thesis has raised the fundamental question set out on page 13, how the sector-focused good governance agenda compares against this critique and where its potential flaws might lie. Drawing on Hyden et al (2004), the thesis has proposed a conceptual framework that has set out how the governance concept has been put to different uses across the broader social science literature. These uses have depended on whether proponents have focused on *results*, *processes*, *rules* or the *ability to steer*.

Figure 1 has presented these four uses in a matrix format, allowing the thesis to identify that the global sector-focused good governance debate has proposed a *short cut route* to get from Quadrant 1 to Quadrant 4 of that matrix. This route has suggested that the

insights gained from analyses that have sought to identify how institutions affect outcomes can be turned around to identify the substance of sector institutional reforms so as to steer towards desired results.

The thesis has argued that the critical reading of the broader social science literature on institutions and institutional change cautions against this logic. The first concern is that, contrary to popular belief, it is not always obvious what good institutions actually are. Second, in the broader social science literature institutional change is seen as the result of multi-level and multi-stakeholder processes, where the enforceability and effectiveness of new rules are not independent of how these rules have come about. This observation suggests that institutional change does not lend itself neatly to a technocratic approach, where a linear results chain is presumed to lead from reform actions and inputs demanded of governments to desired outcomes.

These two concerns question the proposition that improving institutions is the obvious solution for addressing the challenges that producer countries are facing in relation to their extractive resources sectors. Instead, the route from knowing how rules affect results to steering towards better results is longer and more complex. The broader social science literature suggests that the processes by which institutions are established (i.e. research focusing on Quadrant 2) and the ability of the nation-state and other collective entities to enforce these (i.e. research focusing on Quadrant 3) are of critical importance. Thus, the implicit theory of institutional change that prevails in the *conventional debate* and is promoted by the global sector governance agenda (Figure 2) has remained underdeveloped on the question how, and under what conditions, countries ultimately develop the capability to manage their extractive resources sectors for the benefit of their citizens.

The thesis has identified several points where the top-down global agenda on the ‘good

governance’ of the extractive resources sectors seems disconnected from developments that are taking place at the global and the local level. For example, there have been geopolitical shifts in the demand for, and supply of energy and minerals (Mitchell et al 2012); some producer countries are experiencing deeper social and political transformations that could be the result of a number of factors that have come together in particular ways; finally, at the project level resource developers are facing increasing pressure from communities demanding, not only that negative local impacts are assessed and managed, but also that projects leave behind positive developmental legacies.

These disconnections leave resource developers in a challenging position. In the first instance, they rely on government agencies to grant them rights and access to resources. However, the global advocacy around the international good governance agenda all too often sees governments as the source of ‘poor governance’. Meanwhile, resource developers are expected to build good relations with communities and are getting drawn into the *de facto* provision of public goods and services, by either providing these directly or contracting-in third parties to do so on their behalf. This development suggests that there are some unanswered questions about the evolving relationships between resource developers, the governments of producer countries, and the social constituencies affected by the decisions made by the former two.

The thesis has taken as a reference point for its critical analysis historical comparative analyses that have pointed to shifts in alliances of political and economic elites and their relationship to non-elites as the source of transformational institutional change. It has also drawn on the broader public policy literature and its critique of the different uses of the governance concept. Although this literature has more typically focused on institutional change in OECD countries, it alerts to the importance of processes. This literature prompts those interested in the governance of the extractive resources sector to take a

closer look at the processes by which rules are made (Quadrant 2) and how they get enforced (Quadrant 3). By implication, this literature prompts to evaluate how policy analysts on extractive resources governance could draw on existing frameworks to conduct institutional analyses focusing on processes. This forward-looking question will be discussed further in Chapter 8. The remainder of this chapter summarises how the thesis has tested its hypothesis, the findings of the analysis conducted, and the implications for the exiting scholarship.

7.1 The questions

The thesis has embarked from the hypothesis set out on page 30, that much of the existing work on resource sector governance has been slanted towards a particular type of theoretical approach that has prompted a global agenda, and a corresponding action agenda, to develop in one particular direction. To prove this hypothesis the thesis posed the following three high-level questions:

- *How have policy conclusions on extractive resources governance come about and how have these influenced the global agenda?*
- *How do proponents of the global agenda associate extractive resources sector governance with the complexity of, and the challenges posed by institutional analyses?*
- *What are the strengths and weaknesses of the existing scholarship, and what do these imply?*

Section 7.2 summarises the substance to answer these three questions, which has been laid out in Chapters 2 to 6. Next, section 7.3 answers the questions. Finally, section 7.4 draws out the implications of the answer to the third of these three questions.

7.2 The substance

7.2.1 Chapter 2 – *The three main debates*

Chapter 2 has started with a review of the three main debates on the opportunities and challenges faced by countries that produce extractive resources. Captured as Debate No 1, the chapter has summarised the literature on the opportunities associated with investing in the extractive resources sectors. It has outlined the basic thinking on the economic impacts of capital investments in the extractive resources sectors on countries' economic performance, such as liberalising the sector to support economic recovery and growth and using foreign investment to exploit comparative advantages. This literature also recognised that there are some challenges, as a result of the impacts of such investments on the macro-economy and the localities where projects are being developed.

Captured as Debate No 2, the chapter has summarised the extensive literature on the political economy of extractive resources, with its dominant but not exclusive focus on 'resource curse'. It has tracked the evolution of this literature by the outcomes that proponents have focused on and the explanations they have provided for these. This has brought out that there are essentially two main schools of thought: the first argues from an agency perspective (*rent-seeking*); the second argues from a structural perspective (*rentier states and societies*). Both schools have found common ground in identifying that 'institutions' explain cross-country variances in outcomes. This conclusion was turned into the appealing narrative of relating 'good' versus 'bad' governance to the opportunity of 'resource-led development' and to contrast this narrative against the risk of 'resource curse'.

The focus on institutions has built on a general development across several sub-disciplines of the social sciences, recognising the role that institutions play in social, economic and political outcomes. For those looking for a solution to ensure the extractive

resources sectors make a positive contribution to the development of producer countries, it has been appealing to focus on institutions as an input variable and then to propagate respective sector reforms. However, this solution has implied that it is clear what institutions are and how they support ‘good governance’. The thesis has argued that it is disputable whether this is in fact the case, evidenced not least by the wide variety of indicators as well as structural variables that have been associated with ‘good’ versus ‘bad’ institutions.

Captured as Debate No 3, Chapter 2 has picked up on the more recent debate how the extractive resources sectors can be better linked with other economic sectors to support economic diversification and provide broader access to economic opportunities. It has reviewed linkage theory, which associates the technologies of production used in the extractive resources sectors with domestic socio-political characteristics. It has also picked up on industrial policy regaining recognition as a potential tool for governments to shape the developmental impact of the extractive resources sectors. The chapter has shown the connection of this debate to institutional analyses that stress the concept of comparative institutional advantages and the critical functions that institutions provide. This connection questions the more typical perspective that puts state failure as diametrically opposed to market failure. Instead, it alerts to the joint problem of state and market failure. In contrast to the political economic debate, the linkage debate looks at ‘institutions’ as an outcome where industrial policy becomes a vehicle for building comparative institutional advantages. Finally, Chapter 2 has drawn the circle from the linkage and industrial policy debate to the pressures that resource developers are facing to deliver on local content and employment.

Chapter 2 has concluded with four open questions. These have been (1) *what actually are institutions*; (2) *how do institutions change*; (3) *how are institutions enforced*; and (4) *do existing institutions matter for the design of interventions aimed at improving institutions*.

Figure 7 has placed each of these questions in the quadrants of the matrix outlining the four main uses to which the governance concept has been put. For reference, Figure 7 is reproduced below. Chapters 3 to 6 have answered each of the four questions in turn.

Figure 7 (reproduced): Key questions for the governance of the extractive resources sectors

	Results	Processes
Rules	Quadrant 1 – <i>What actually are institutions?</i>	Quadrant 2 – <i>How do institutions change?</i>
Steering	Quadrant 4 – <i>Do existing institutions matter for the design of interventions aimed at improving institutions?</i>	Quadrant 3 – <i>How are institutions enforced?</i>

7.2.2 Chapter 3 - Defining institutions

Chapter 3 has focused on Quadrant 1 and has asked *what actually are institutions*. To explain why the quality of institutions has been viewed as the critical factor explaining variance in outcomes across producer countries, the chapter introduced a taxonomy (Figure 8) that set out on the vertical axis the four levels of social analyses that Oliver Williamson had developed to take stock of the achievements of the rediscovery of institutional analyses. The horizontal axis set out the three main methodological approaches that researchers have used to investigate the causal connections between the extractive resources sectors, institution and economic, political and social outcomes.

This taxonomy has then been populated with the different strands of literature reviewed in Chapter 2. This has brought out several observations. First, there is no universally accepted definition of what institutions actually are. Second, what institutions have been perceived to be (i.e. their implied ontology), has conditioned the methodologies that have been chosen to assess their impact on outcomes. In other words, different ontologies have underpinned methodological choices, which in turn have conditioned the policy conclusions researchers have drawn. Finally, the taxonomy has pointed to a line of division between one two set of studies: one set has tested theoretical propositions based on conceptualising institutions as an input variable on the basis of microeconomic assumptions about the behaviour of agents; the other set has contributed to theory development on the basis of systematically contrasting and comparing country cases where proponents have seen sector as well as broader institutional arrangements as the outcome of multi-level and multi-stakeholder processes.

The first set of studies has suggested that there is a *short cut route* from Quadrant 1 to Quadrant 4. This suggestion has underpinned the top-down action-oriented debate on the good governance of the extractive resources sectors. Meanwhile, the second set of studies has pointed towards a *longer route* from Quadrant 1 to Quadrant 4, Quadrant 2 and Quadrant 3. This *longer route* has suggested that the concept of institutions is analytically valuable for identifying where and when the combination of structural conditions and agency have results in social relationships that have supported, or undermined, positive outcomes. However, the concept is ill suited to serve as a variable on which to base advice on sector reforms. Institutional arrangements that serve positive collective outcomes cannot simply be brought about by externally designed and demanded sector reforms. Whether this reform approach has worked, has depended on additional conditions.

The *longer route* suggests that a critical condition for success is what alliances are struck between political and economic elites and how these affect the distributional impact of the use of resource rents. In the positive cases, such alliances have supported fiscal and wider public policies that have helped to build cross-sector linkages and have more equally distributed economic and social opportunities. This suggests that positive dynamics towards building fortunate alliances within the domestic political area of producer countries is critical for ensuring that the opportunities associated with the extractive resources sectors are translated into sustainable economic, political and social development. The question that arises is how such alliances can be built and what role (positive or negative) resource developers can play in this respect. As suggested by Quadrant 2 and Quadrant 3, this is where the processes by which institutions are built and how they are enforced come into play.

7.2.3 Chapter 4 – *Changing institutions*

Focusing on Quadrant 2 of Figure 7, Chapter 4 has reviewed the social science literature on the question *how do institutions change*. This discussion has embarked from the premise that the advocates of the global good governance agenda as well as the governments of producer countries and resource developers share the objective to bring about positive institutional change. If this is so, it should be useful to bear in mind what is already known about how institutions emerge and how they change.

Chapter 4 has started off with a review of the results of institutional reforms in the extractive resources sectors introduced over the past decades. First, it has found that the liberal reform agenda underpinning these reforms often aimed narrowly at encouraging foreign resource developers to invest. The developmental impact of meeting this narrow objective has been mixed and a number of countries have backtracked from the liberal reform agenda. This first section of Chapter 4 has discussed four sets of explanations that

have been put forth to explain this development. These have included (1) '*resource nationalism*', associated with rising global demand and prices; (2) the '*obsolescing bargain*', associated with investment projects moving from the development to the operations phase; (3) the argument that there is lack of political will among politicians and bureaucrats to properly implement liberal institutional reforms; and (4) increasing domestic pressure on politicians and bureaucrats to deliver more tangible benefits to domestic constituencies, on the back of resource property rights having been granted to resource developers but the socio-economic costs of their use not being perceived to be adequately recovered.

The chapter has found that the first three explanations have been well aligned with the liberal reform agenda; they constitute the *conventional perspective*. Most narrowly, the first two explanations simply point to changes in external conditions as the cause for reform backtracking and reversals. The third explanation reflects the global agenda on the good governance of the sector. It promotes externally induced institutional measures to tie politicians and bureaucrats to normatively perceived standards of good sector governance. It is the fourth explanation that offers an *alternative perspective*. It stresses the importance of positive collective action within producer countries. Invariably, such action has to be backed not only by formal level 2 and 3 institutions, but also by more informal level 1 institutions, including for example a shared understanding of the direction of travel that is of mutual interest to producer countries, resource developers, citizens and other third parties.

Second, Chapter 4 has identified the common denominator that prevails across the broader social science research on institutional change. This is, that theories of institutional change explain major transformations in the structures that underpin economic, political and social exchanges and why these have occurred, or not. Chapter 4

has argued that this body of literature holds some strong messages for those seeking to reform particular sector institutions. First, transformational changes to institutional arrangements typically do not just affect one of the levels set out by Williamson's hierarchy; it involves all three of them. Second, higher-level institutions constrain those that lie below. And third, the greatest potential for conflicts and tensions arises at the intersection between level 1 and 2. As per Chapter 3, this has not been the focal point for the proponents of the global agenda on the good governance of the extractive resources sectors.

These messages have reiterated the high-level finding of Chapter 3, that there is a fault line between (i) the liberal approach to reforms that has viewed institutions as inputs to achieving desired results, i.e. the *short cut route* from Quadrant 1 to Quadrant 4, and (ii) the perspective that has perceived successful institutional arrangements as the outcome of multi-level and multi-stakeholder processes, i.e. the *longer route* from Quadrant 1 to Quadrant 4, via Quadrant 2 to Quadrant 3. Figure 12 has shown this fault line. The liberal approach has typically ignored the institutions situated at level 1 of Williamson's hierarchy. However, the conjecture is that it is these types of institutions that often undermine the functions that the reformed institutions at level 2 and level 3 are expected to deliver.

Third, Chapter 4 has used the social science concept of 'property rights' to contrast the liberal approach against the concerns of its critics. Figure 13 has shown that the property rights concept sits squarely at the intersection of level 1 and level 2 institutions, with sector legal frameworks formalising such rights from level 2 downwards. The chapter has argued that the liberal school of property rights has underpinned sector institutional reforms from the 1980s onwards, building on a particular reading of the Coase Theorem and its supportive postulates. However, critics have pointed to two flaws. First, its

particular reading of the Coase Theorem has resulted in the liberal school not recognising the role that level 1 institutions play in making markets work (or not). Second, more recent extensive research on natural resource ownership conducted over the past decades has overhauled the fundamental postulates on which the liberal reform agenda was built in the first place.

This critique points to level 1 institutions sitting above sector legal frameworks and other sector specific institutions, lending the latter the legitimacy that they require to be enforceable. Legitimacy clearly is not an input factor, but something that is the result of a broadly respected decision making process. To explore what might lie behind the pressures on both the governments of producer countries and resource developers that arise at the intersection of level 1 and level 2 of Williamson's hierarchy, the remainder of Chapter 4 has posed three questions. These have focused on (1) *the role of the state in the provision of property rights*; (2) *the wider socio-economic benefits associated with providing such rights as a 'public good'*; and (3) *the impact of elite constellations and pre-existing institutional arrangements on bringing about transformational institutional change*.

Chapter 4 has concluded that the narrow perspective of the liberal reform agenda on both the strength and the form-focused appropriateness of sector governance is limited: it ignores the context-specific domestic dynamics between actors and existing institutional arrangements that affect the legitimacy and thus the enforceability of sector legal frameworks and wider sector-related public policy decisions. This highlights a positive role for the state to address conflicts and tensions around the exploitation of extractive resources, rather than being relegated to a negative role by the perspective of the proponents of the *rent-seeking* argument. It also suggests that it is not a foregone conclusion that stronger property rights are always better (Chang 2007). From a broader

developmental perspective, major economic transformations have coincided with fundamental changes in property rights regimes. Structural changes, such as technological breakthroughs and demographic shifts, are believed to have brought these about, leading to challenges to the political power bases backing the previous property rights regime (Evans 2007)¹⁰⁵.

7.2.4 Chapter 5 – Enforcing institutions

Chapter 5 has turned to Quadrant 3 of the conceptual framework matrix to pose the question *how are institutions enforced*. Here, the ability to enforce institutions relates to producer countries' administrative capacity to follow through on their public policy decisions, for example, if public authorities can actually enforce the laws, regulations, fiscal regimes and contracts that governments have approved or signed up to.

Chapter 5 has focused at the intersection between levels 1 and 2 of Williamson's hierarchy, where the relationship between the state and society is critical. The ability of a state and its public authorities to enforce new rules is conditioned either by its ability to coerce, or the legitimacy of the rules it devises, and to which citizens and collective entities are expected to adhere. Legitimacy underpins the positive exercise of public authority, where broad-based acceptance and trust supports compliance. In the context of the extractive resources sectors, this discussion is about the source of the power of public authorities to grant rights and access to resources and how these rights are balanced against the full economic, political and social costs of providing and enforcing them.

Chapter 5 has looked towards the literature on state capacity to inform what lies behind the enforcement of rules. This particular literature has drawn attention to 'developmental states' as the key drivers of economic, political and social transformations. The chapter has compared three views on developmental states to discuss what the prospects are for

¹⁰⁵ For a comprehensive historical review of resource property rights, see Scott (2008).

producer countries to develop the capacities typically associated with such states. Often these prospects are considered to be negative. However, Chapter 5 has concluded that the governments of producer countries are not categorically relieved from seeking legitimacy. The historical view suggests that achieving broad-based legitimacy has to do with how critical actors interrelate; most prominently how political and economic elites are aligned between themselves, and how these alliances have affected non-elites. The respective literature suggests that state capacity and the institutions of enforcement that are built in this process are the outcome of reformulated social contracts between old and new elites and their relationship with non-elites. This view has suggested that positive alliances between critical actors supporting positive institutional change can be built. However, while the direction of travel is clear, there is no generic template how one can best move towards this objective. As Quadrant 3 has suggested, this is about steering processes towards the enforcement of new rules, but where positive results are not necessarily guaranteed. It leaves an open field for researcher interested in process-oriented institutional analysis to build on existing, and develop further conceptual frameworks and theories that captures how variance in how processes have unfolded have supported positive outcomes in some countries but not in others, what processes might be occurring in the present that might be leading towards better outcomes or under what additional conditions this might be the case, and to spell out what could be positively contributed by whom to encourage the types of processes that might deliver positive outcomes in the future.

7.2.5 Chapter 6 - Variances in sector legal frameworks

Chapter 6 has made a contribution to the difficult space of Quadrant 4, which is about steering processes towards desired results. By surveying the variances in sector legal frameworks that exist across producer countries and how these have come about, the

chapter has tentatively probed into the question, if existing institutions matter for the design of interventions aimed at improving institutions. The chapter has started from the premise that sector legal frameworks underpin the rights that the public authorities of producer countries grant to resource developers. A positive answer would suggest that variances in sector legal frameworks and, importantly, how these have come about should have some impact on how well producer countries can enforce these frameworks in support of positive development outcomes.

The chapter has mapped the four tiers of sector legal frameworks into the appropriate two levels of Williamson's hierarchy on social science analyses. To bring out cross-country variances, the chapter has posed a set of questions for each of the three relevant tiers. For constitutional provisions these have included: (1) *who are the primary owners of extractive resources*, (2) *what is the legal tradition of the producer country*, and (3) *what are the origins and the trajectories of constitutional provisions*. For sector specific legislation the chapter has asked: (1) *how general or specific is this legislation*, (2) *how are resource property rights granted*, and (3) *what is the role that sector legislation assigns to NOCs or NMCs*. Finally, contracts and agreements have been differentiated on the basis of the differences between (1) the oil and gas sector and (2) the mining sector.

The chapter has concluded that its review showed a broad pattern where, for one set of countries, sector legal frameworks evolved as part of countries' processes of building and consolidating nation-states. While these countries may still be experiencing tensions and conflicts at the intersection of level 1 and level 2 institutions, in general there are legitimate political-administrative processes in place to resolve, or at least to manage these. For another set of countries this condition does not apply, at least not to the same extent. External factors have had a much greater influence in shaping sector legal frameworks, with less or little attention paid to whether these are compatible with or

contradict other institutional arrangements, including those at level 1 which are often not formalised, such as for example communal rights to resources claimed by traditional communities. This leaves the chapter to point to an open field for research to develop theory on whether the processes underpinning changes to sector legal frameworks affect their legitimacy and enforceability and, by implication, whether this makes a difference to the impact of the extractive resources sectors on broader development outcomes.

7.3 The answers to the three high-level questions

Finally, this section presents the answers to the three high-level questions presented in the introduction and repeated in section 7.1. The first was a reflective question: (1) *how have policy conclusions on extractive resources sector governance come about, and how have these influenced the global agenda*. The second question focused on the present: (2) *how do proponents of the global agenda associate extractive resources sector governance with the complexity of, and the challenges posed by institutional analyses*. The third question looked forward: (3) *what are the strengths and weaknesses of the existing scholarship and what do these imply*.

7.3.1 Policy conclusions on resource governance

Question 1 - How have policy conclusions on extractive resources sector governance come about, and how have these influenced the global agenda?

The thesis has criticised the liberal reform approach to the question how the extractive resources sectors should be governed. Chapter 2 has explained that this approach had initially focused on the economic opportunities associated with these sectors, in particular in relation to attracting foreign investment. That chapter has also revealed the intellectual underpinning of this approach, namely it has built on a particular reading of the ‘Coase theorem’ and associated postulates. These have stressed the strength and the

competitiveness of sector legal frameworks as a key factor encouraging positive investment decisions.

Chapter 2 has also shown that, while it was recognised from early on that attracting foreign investment to the extractive resources sectors could bear some challenges, these were initially confined to include technically manageable macroeconomic effects and local-level project impacts. Macroeconomic effects have been considered the responsibility of producer countries, possibly drawing on the help of international technical expertise sourced from the international financial institutions. In turn, managing the local-level impacts have been considered the responsibility of resource developers, where both international standards and industry self-regulation have set the benchmark for how to approach assessing, managing and remedying these impacts.

Chapter 2 has furthermore recognised that since the mid 1990s a comprehensive body of research has shifted attention to the political economy of extractive resources, enquiring about the political and social factors that have underpinned the economic, political and social outcomes experienced by producer countries. The thesis reviewed this literature by drawing out the differences between the two main schools of thought that it has produced. Both schools have landed on ‘institutions’ as the factor that could not only explain the variance in outcomes observed across producer countries. Institutions could also be turned into a cure and a prophylaxis. This debate has gained currency against the background of the general rediscovery of institutional analyses that was brought into the development discourse from the mid-1990s. It nurtured the preoccupation with ‘good governance’ that has guided the efforts of many international development agencies and their search for generic templates that could inform institutional reforms, which would then steer countries towards achieving the desired development outcomes.

The taxonomy set out in Chapter 3 has identified that this focus has ignored (a) that

institutional analyses are very diverse, and (b) that there is no universal definition on what institutions actually are. There is, however, a hierarchy of levels at which social scientists have looked at the role that institutions play and there are some insights how these different levels connect with each other. By applying a taxonomy that sets these levels of analyses against researchers' methodological preferences, Chapter 3 has revealed that there has been a dominance of cross-country statistical analyses seeking to derive generalisable explanations on the basis of drawing causal inference from relating independent explanatory variables to outcomes. These analyses have focused on testing theory derived from micro-economic postulates as well as narratives that have built on specific country case examples. The measurement of institutions as an explanatory variable has depended on the availability of proxies that could be deployed in cross-country statistical analyses. This has narrowed the focus on selected level 2 and level 3 type institutions. These have then served to underpin normative policy conclusions about the types of institutions that make for 'good governance'.

On the basis of this observation, the thesis concludes that the global agenda on resource governance has been brought about by a methodological preference that has supported theory testing. This preference has supported an ontological stance that has defined institutions in a way that lend itself to immediate policy conclusions on what needs to be done to improve the governance of the sectors to achieve better outcomes. This is the *short cut route* from Quadrant 1 to Quadrant 4. This route has divorced the good governance agenda from the broader social science literature that points to the *longer route* via Quadrant 2 and Quadrant 3. Because this route captures the different uses to which the governance concept has been put, it suggests that the process-related concerns that arise in Quadrant 2 and Quadrant 3 are not trivial. In fact, the processes through which institutions come about and are enforced could be critical for achieving positive outcomes. This suggests that, going forward, those interested in improving the

governance of the extractive resources sector should draw inspiration, and build on existing approaches to institutional analysis that focus on processes and the collective action (or lack thereof) that these produce.

7.3.2 Resource sector governance and the complexity of institutional analyses

Question 2 - How do proponents of the global agenda associate extractive resources sector governance with the complexity of, and the challenges posed by institutional analyses?

On one hand, institutional analyses have served the proponents of the global agenda well. Chapter 2 has shown that when the variable ‘institutions’ was brought into Debate No 2, it allowed researchers to explain the cross-country variances in outcomes across producer countries. This, in turn, dispelled the suggestion that there was something inherently bad about the extractive resources sectors where poor outcomes could not be avoided. The debate on the opportunities and challenges of the extractive resources sectors could broaden out and explain why poor outcomes had occurred in many, but not in all countries. The proponents of the global agenda could move on to identifying policy conclusions against ‘resource curse’ and in support of resource-based development.

On the other hand, institutional analyses are complex and pose challenges. Chapter 3 has demonstrated this complexity when it introduced Williamson’s hierarchy of social analyses and the associated three levels of institutions. This hierarchy has laid open that there is no agreed definition on what institutions actually are and that institutions operate at different levels. Furthermore, the hierarchy has suggested that each higher level constrains those that lie below and that the intersection between level 1 and level 2 is often the most critical. With reference to sector legal frameworks, Chapter 4 showed that it is at this intersection where the state takes a critical role in formally granting

rights to resource developers and to enforce these. Thus, it is at this intersection where the benefits of such rights are, either explicitly or implicitly, balanced against the costs of granting, enforcing and using these. Conflicts and tensions often arise at this intersection because different constituencies disagree on how the benefits and costs of rights to resources are, or should be, distributed.

The proponents of the global agenda have typically focused narrowly on level 2 and level 3 institutions, because this has allowed them to look at ‘institutions’ as a solution. However, using the variable ‘institutions’ as an analytical concept to explain variance in outcomes does not automatically make it a suitable entry point to target well-meant interventions. The analytical usefulness of ‘institutions’ lies in the ability to bridge the well-known gap between agency-focused explanations, where individuals are held responsible for economic, political and social outcomes, and structural explanations, where the actions of individuals are subjected to more or less hard-wired conditions.¹⁰⁶ However, it is this position between structural conditions and agency that make ‘institutions’ fundamentally a dependent variable. Institutions only work as an input variable, if they are underpinned by microeconomic assumptions about the behaviour of agents,¹⁰⁷ where institutions can then be devised as a constraint. It is worth recalling from Chapter 3 that it has been the desire to generalise the insights gained from relating rules to results that led to the proposition of there being the *short cut route* from Quadrant 1 to Quadrant 4, where institutions are seen as constraints. However, this route has left it unclear how those actors who, on one hand, are seen to require that they need to be constrained will also, on the other hand, provide these very same institutions as part of their role as agents of the state.

¹⁰⁶ This is a long-standing challenge that is well recognized by the philosophy of the social sciences; the development of institutional analyses is tied to the recognition of this challenge. The scholarship on the governance of the extractive resources sectors shows this challenge in the difference between the rational choice and the structural institutional analyses summarized in sub-section 2.2.3.

¹⁰⁷ It is theoretically also possible to consider alternative agency-based assumptions, drawing on insights from psychology.

The *longer route*, via Quadrants 2 and 3, views institutions as an outcome of multi-level and multi-stakeholder processes, where structural conditions, existing institutional arrangements and different actors interact. The broader social science research that relates to this route has suggested that a critical condition for positive institutional change resulting in broad-based positive outcomes is that economic and political elites come together to forge fortunate alliance which not only benefit themselves, but also non-elites. This suggestion prompts a closer look at the processes by which actors make rules and how they manage to enforce these.

The thesis concludes that, in general, the proponents of the global agenda have shown little regard for the complexity of, and the challenges posed, by institutional analyses. They have downplayed that knowing that institutions matter is not the same as knowing how they come about or how to change them. They have focused on the types of institutions that are located at level 2 and level 3, thus not recognising that the critical point of intersection is between those at level 1 and those at level 2. Finally, they have ignored the lack of generalizable theories that connect the different levels of institutions, while at the same time they have also ignored that the broader social science literature has recognised this challenge.¹⁰⁸

It lies near to suspect that acknowledging the complexity of, and the challenges posed by, institutional analyses would have undermined the certainty with which the advocacy underpinning the global agenda could put forth solutions to improve sector governance. Activists and policy advisers would have had to acknowledge that the role they should perhaps play should focus more on accompanying processes and supporting positive collective action, rather than supporting adversarial-framed debates that play into the convenient, but ultimately unhelpful dichotomisation of ‘good’ versus ‘bad’ institutions,

¹⁰⁸ For example, see Ostrom (2005) and Aligica (2014).

and ‘good’ versus ‘bad’ governance.¹⁰⁹ From a normative perspective, it could be argued that it is acceptable for activists to not acknowledge the complexity of, and the challenges posed by, institutional analyses. However, by way of the nature of their profession academic scholars could be expected to make their assumptions explicit. Unfortunately, when proponents of policy advice from that constituency draw selectively on analytical work to suggest practical interventions on how to improve institutions, they knowingly leave assumptions and implied causalities undeclared.

7.3.3 Strengths and weaknesses of the existing scholarship

Question 3 – What are the strengths and weaknesses of the existing scholarship, and what do these imply?

Summarising the three main debates, the thesis has documented how the existing scholarship on the opportunities and challenges of countries producing extractive resources has evolved and diversified. From the initial consensus around the promotion of foreign investment and macroeconomic issues that existed in the 1980s and 1990s, the scholarship expanded into a much broader debate on the political economy of the extractive resources sectors and, more recently, the rediscovery of industrial policy as a means to build cross-sector linkages.

This broadened debate has exhibited several strengths. It has dispelled some convenient truths, such as clarifying that foreign investment in the extractive resources sectors does not *per se* deliver positive development outcomes but that several additional conditions also have to fall in place. Similarly, it has underlined that technical advice alone is not a panacea, although of course it has its place, for example with respect to managing the macroeconomic and fiscal impacts of large-scale export-oriented projects. And, once the

¹⁰⁹ Boutilier and Black (2013) provide an interesting comparative case study that picks up on the impact of pressure from activism pursuing a global agenda on on-the-ground improvements in better assessing and managing cumulative impacts.

concern had been raised that there might be an unavoidable negative relationship between the extractive resources sectors and economic, political and social outcomes, scholars have tried hard to identify potential entry points for turning this relationship into a positive.

However, the broadened debate has also suffered from weaknesses. Focusing on the global agenda that has thriven on the back of the broadened debate, two of the weaknesses were reflected in the answers provided in sub-sections 7.3.1 and 7.3.2, respectively.

These two sub-sections contained that, first, the *short cut route* from Quadrant 1 to Quadrant 4, proposed by the dominant global agenda, has neglected the processes by which institutions are established and how they are enforced. In turn, the *longer route* via Quadrant 2 and Quadrant 3 has alerted to the importance of processes and thus, of institutional analyses that focus on processes. Second, the proponents of the global agenda have principally neglected the complexity of, and the challenges posed by institutional analyses, because their ambition has been to develop policy conclusions against ‘resource curse’ and in support of resource-based development. This ambition has been served by looking at institutions as a solution. Not least, this has come at the expense of underplaying the critical role of the state at the intersection of level 1 and level 2 of Williamson’s hierarchy, where the benefits associated with granting rights to resources are (implicitly or explicitly) balanced against the costs associated with granting, enforcing and using these. The conundrum for the global agenda has been that, while it has looked at the politicians and bureaucrats that act on behalf of states as the cause of ‘bad’ institutions, it has implicitly assumed that somehow these very same agents will at some point provide ‘good’ institutions and thus support good resource sector governance. At stake here is the role of these actors in supporting positive collective action that might

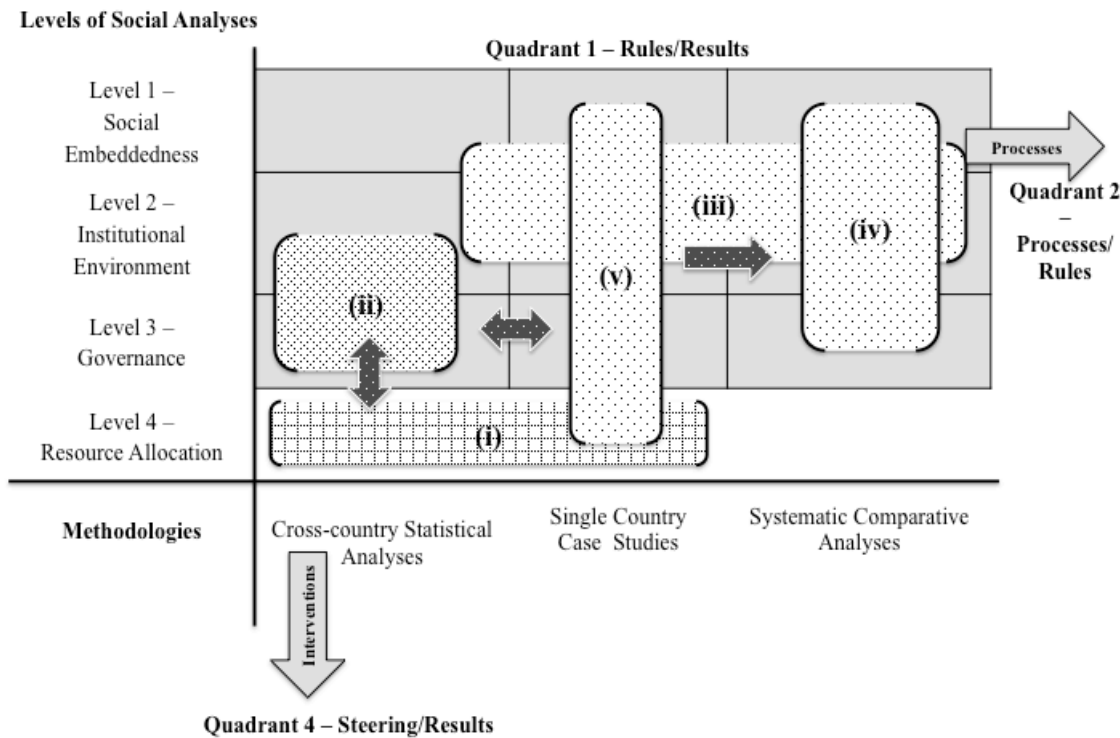
go against their otherwise *a priori* defined interests.

A third weakness can be identified by comparing the strengths and weaknesses of the existing scholarship that has focused at that country level with the approach taken by corporate social responsibility and social performance practitioners. Over the past two decades, these proponents have worked on identifying and managing the socio-economic impacts of the extractive resources sectors from the local-level project-focused perspective. It is notable, that the proponents of the global agenda have taken little note of the progress on the ground that corporate practitioners have made, and the lessons they have learned. Likewise, corporate practitioners, and the academic literature that has underpinned their work, have also come in rather late to recognise the approach and the consequences of the work carried forward by the proponents of the global agenda.¹¹⁰

When corporate socio-economic impact assessments conducted for specific projects are placed with the analytical space developed in Chapter 3 and set out in Figure 11 (for reference reproduced below), it becomes apparent that its proponents have also faced the problem of underplaying the role of the state.

¹¹⁰ Author's personal observation.

Figure 11 (reproduced) – Populated Quadrant 1 Taxonomy



These corporate assessments try to identify and manage a broad range of project-related local-level impacts that can relate to all three of the institutional levels of Williamson's hierarchy with the view to identify their consequences for the risks and costs a resource developer faces at level 4 of that hierarchy. Thus, sharing this similarity with individual country case studies, these assessments can be located in the same multi-level space marked with (v).

Corporate socio-economic impact assessments underplay the role of the state, because their explicit project-focus approach means that impacts are addressed at the level of the relationship between resource developers and impacted communities. They typically do not include a fuller appraisal of the broader and the sector-relevant institutional arrangements and public policy issues that are critical for the positive developmental impacts of individual projects and the extractive resources sectors as a whole. At best, these assessments miss to identify how and where their findings and implications on

negative impacts could be fed into processes that could potentially produce mitigating institutional arrangements and public policies. At worst, they miss out to identify the structural-institutional conditions that lie behind the evolving impacts that they are trying to address. For example, a socio-economic impact assessment may say something about the labour demand that may be created by an extractives project, but it will not go as far as to identify if and where the producer country's labour market institutions may run counter to corporate labour sourcing strategies, or what could be done by whom with respect to education and skills development policies to prepare local labour market participants for the opportunities that a project may bring.

Thus, in addition to underplaying the role of the state in addressing the challenges faced at the intersection of level 1 and level 2 institutions, the project-focused approach has also overplayed the role of resource developers. Where there is pressure to meet the expectations of, not only particular local communities, but also regional, national and global constituencies, there would appear to be a need for complementary inputs that can identify and potentially help to address structural-institutional challenges that lie beyond the local level. Looking forward, Figure 11 suggests that project-focused assessments would benefit if, as indicated by the arrows pointing to the right of space (v), they were better connected to the insights gained by the works that is reflected in spaces (iii) and (iv), with these in turn connecting to Quadrants 2 and 3. To recall, spaces (iii) and (iv) contain structural institutional analyses and systematic comparative analyses focusing at the intersection of level 1 and level 2 institutions. When these types of institutional analyses move in the space of Quadrants 2 and 3, they are - by their very nature - focused on the processes by which critical actors take individual and collective decisions and institutional change comes about.

The recent literature on impact assessments has noted that the original intention behind

developing these assessments was for these to serve as a tool for communication so as to pre-empt and address potential conflicts and tensions between resource developers, local communities and others. However, it has been observed that this objective has been undermined where such assessments have become reduced to a compliance tick-box exercise, as a result of having been made a regulatory requirement (Vancley and Esteves 2011).¹¹¹ This observation suggests that the original intention did capture, at least implicitly, the need for different constituencies to collectively address the types of challenges that arise at the intersection of level 1 and level 2 institutions. However, from the perspective of this thesis, this intention has missed out to provide a conceptual framework that sets out why collective action is important, not only in relation to resource developers and the pressures they are facing from local communities, but also with respect to the critical role that the state and its public authorities play. From there on one could have identified where and how other third parties could play a supportive role, for either of the three or all of the three constituencies: local communities, resource developers and public authorities. These third parties include, for example, delivery-oriented non-governmental organisations and international development agencies, but also social and entrepreneurial interest groups in the wider private sector of producer countries. As per the weaknesses of the existing scholarship described in sections 7.3.1 and 7.3.2, it would merit to put greater emphasis on the analysis of multi-level and multi-stakeholder processes that have succeed in bringing about collaborative efforts that can improve the balance between the benefits and costs associated with the granting, enforcing and using of resource property rights.

¹¹¹ In combination with Environmental Impact Assessments (ESIAs), formal and public socio-economic impact assessments (SIAs) are often part of licensing processes for which the content is prescribed. Resource developers may in addition conduct more comprehensive internal assessment serving internal risk management purposes.

7.4 Implications of the strengths and weaknesses of the existing scholarship

It is left to this section to draw out forward-looking implications from the strengths and weaknesses of the existing scholarship on the governance of the extractive resources sectors.

7.4.1 Building on the strengths

Building on the strengths of the existing scholarship, there are several implications that further research could consider. First, the thesis has made the case that there is a need to focus more research on sector-relevant institutional arrangements being considered as a dependent variable, rather than as an explanatory variable. This presents an opportunity for researchers to contribute to the development of new theory and to build a better understanding of the processes that have led, and hopefully are yet to lead, to better management of the extractive resources sectors in support of economic and social development. For example, Chapter 6 has indicated that there is still a lot to be learned about the socio-political and administrative processes that lie behind the formulation of sector legal frameworks and their effective and un-contested enforcement. Another area where theory development would be helpful is on the question what contributions third parties can play in helping producer countries improve their sector legislative frameworks and sector-related public policies to achieve a better balance between the benefits and costs associated with the exploitation of extractive resources.

Theoretical innovation could also help to better connect the different levels of institutions identified by Williamson's hierarchy, in particular the intersection between level 1 and level 2 institutions. To recall, it is at this point where the state and its public authorities take a critical role in granting rights to resources and to enforce these rights. For example, a question located at this point of intersection is how national-level legislation deals with the recognition (or not) of the resource-sector related rights of indigenous peoples. New

theoretical propositions, developed on the basis of systematic comparative analyses, could help to explain how some countries have addressed this issue and what their experiences with these arrangements have been. This could deliver insights for countries that are struggling with acknowledging and accommodating such rights (but also want to develop their extractive resources sectors) on potential options, as well as alert resource developers to associated risks and costs. Several other examples could be thought of, such as how social expectations of maintaining independent livelihoods may clash with the presumption of the desirability of dependent labour relationships associated with the creation of sector-related employment opportunities.

A second implication that builds on the strengths of the existing scholarship is that researchers could move on from framing questions mostly at the level of comparing countries and their performance. They could also look above and below that level, recognising their interconnectedness. For example, looking above the country level could involve comparative research into specific aspects of the global corporate practices and standards of multi-national resource developers and their experiences with these across different countries. Variance in these could then also be compared against the background that many resource developers are working in the same producer countries, where they may be experiencing similar challenges in relation to these challenges, or perhaps different ones. Looking below the country level, there is more that could be done to compare sub-national constituencies, such as regions, provinces and districts, where, for example, similar project impacts may have triggered different dynamics, or where despite substantial differences in corporate practices engaging with public authorities at the sub-national level these may have led to similar disappointing outcomes.

This last suggestion hints at another opportunity, that more research could also be carried out into the sub-national delivery chain of public goods and services that are critical for

the extractive resources sectors to meet expectations on local content and employment. For example, better research could be conducted into the sub-national provision of sector-relevant public services such as, for example, secondary education and technical skills development or labour market services. More generally, there is an opportunity to focus more research on the conditions that support, or undermine, cross-sector linkages between the extractives and other economic sectors, i.e. to pick up on the topics that the evolving Debate No 3 has flagged. Furthering this debate is likely to draw more attention to the functions that institutions provide, as well as the concept of comparative institutional advantages, where industrial policy becomes a vehicle for institution building. When industries policies are successful, the domestic private sector benefits from the provision of public goods and services in a way that sustainably expands its productive capacity.

The two implications outlined above bear a third implication, on researchers' methodological choices. The literature review presented in Chapter 2 has shown that, at least until recently, cross-country statistical analyses testing theories have dominated the debate on the political economy of the extractive resources sectors. However, investing in theory development, as suggested above, will require that the balance be shifted towards more comparative analyses and single case studies for the purpose of developing and assessing the validity of new hypotheses. This suggests that a better mix of methodological approaches is necessary. Chapter 3 has referenced several examples where proponents have already moved in this direction.¹¹² A challenge could be that the prevailing dominance of cross-country statistical analyses is related to researchers' incentives to maximise their publications, where empirical investigations into how the extractive resources sectors and the political-economic and political-administrative

¹¹² This comment is consistent with the debate in the social sciences about the competition versus complementary between qualitative and quantitative methods. It has come down on criticizing the statistical work for not identifying new hypotheses on previously unobserved variables and therefore not supporting fresh thinking about causalities (George and Bennett 2004, also Williamson 2000).

systems of specific producer countries actually work are considered too time-consuming and effortful. It seems that, for academics doubling as high-level policy advisors, recognising these details has become an afterthought, to the detriment of those whom they advise.

A fourth implication building on the strengths of the exiting scholarship is to get into the details of the relative scale of the macroeconomic, fiscal, employment and other impacts that different kinds of extractive minerals projects generate, and the distributional implications these imply in relation to the types of countries and regions where such projects are located. Gaining more clarity on the variance in distributional consequences of extractive resources projects could provide an entry point to better understanding in particular country contexts the social contracts and accountabilities underpinning the relationships between different groups of national elites and their relationships to non-elites. The structure of these relationships could be expected to affect the political cost-benefit trade-offs of political elites to invest in state capacity building to leverage the long-term opportunities versus exploiting the short-term benefits associated with developing the extractive resources sectors.

7.4.2 *Tackling the weaknesses*

The weaknesses of the existing scholarship are not easy to tackle. This thesis has argued that greater emphasis should be placed on the types of institutional analyses that emphasize the processes by which rules and institutions are put in place and how processes can serve to enforce public policies. The normative question lurking in the background is, who could do what to support processes that result in legitimate and enforceable public policies delivering developmental benefits on the back of the exploitation of extractive resources.

The first implication of a stronger focus on processes is that the role of policy advisers

changes to one where their task becomes to guide producer countries through processes where strategic decisions are made in support of building countries' capacity to capture the long-term opportunities associated with the extractive resources sectors. This would mean that each producer country would have to be supported on its own merit to balance project-specific benefits against country and project-specific costs, looked at from the corporate commercial, the public accounts, and the full economic perspective. Rather than focusing narrowly on specific sector institutions, such as specific contracts, laws or fiscal regimes, this role would entail guiding countries through complex decision-making processes with the objective to achieve greater consistency and complementarity between, not only the sector-specific, but also wider institutional arrangements, including those located at level 1.

It could be argued that third parties, such as the Revenue Watch Institute or the Natural Resources Charter¹¹³, who are predisposed to advocating a mainstreamed global agenda on good sector governance, are not particularly suitable to lead in such a role. Their agenda has tended to neglect the institutions located at level 1 of Williamson's hierarchy. This agenda also presumed, rather than verified, the motivations and objectives of producer countries and resource developers. Nevertheless, a new development in the operationalizing of the global agenda on good sector governance is for such third parties, with support from international development agencies, to lead country-level assessments on the readiness of producer countries to host extractive resources projects.¹¹⁴ It remains to be seen, if these types of assessments will gain the legitimacy to influence multi-level and multi-stakeholder engagement processes, achieving positive collective action among resource producers as well as the different resorts and tiers of the government of producer

¹¹³ As of June 2014, these two organizations have merged into a new organization, the Natural Resources Governance Institute (NRGI).

¹¹⁴ An example is the FOSTER project in Nigeria (Oxford Policy Management 2013a). A similar exercise may be conducted in Tanzania, see http://www.uongozi.or.tz/news_detail.php?news=1873 (last accessed: 03.02.2014).

countries and a broad range of national and international non-governmental constituencies. To date, opinions are divided as to whether such, often externally imposed initiatives carry this legitimacy, or whether alternative vehicles for collective action, such as the African Mining Vision, could potentially be more successful.¹¹⁵

The second implication of a stronger focus on processes concerns the role of international development agencies, where they are supporting producer countries. Their legitimacy to support processes can be tainted by the pro-active role they played in relation to Debate No. 1 on the opportunities associated with foreign investment in the extractive resource sectors. Over the past decade, some international development agencies have also pro-actively supported the global agenda on good sector governance, hoping for improved transparency to improve the accountability of politicians and bureaucrats in producer countries and that of resource developers.¹¹⁶ More recently, in some of the newer producer countries a situation can be observed where several international development agencies are approaching governments and third parties to address very similar sector-focused policy issues. This suggests that there remains a need for better coordination among these agencies. More positively, as Debate No 3 on building better linkages between the extractive sectors and other economic sectors evolves, there is ample room to re-shape the role that international development agencies can play to achieve this objective.

The second set of implications centres around the underplayed role of the state, and the overplayed role of resource developers. First, it is easier to address the overplayed role of resource developers. Arguably, resource developers could do more to set out where their role in supporting the developmental benefits of the extractive resources sectors reaches its limits and the role of the state and its public authorities should come in more strongly.

¹¹⁵ Author's personal observation.

¹¹⁶ See Dietsche et al (2013) for review of the different phases of donor support.

However, this would require that resource developers adopt a public sector perspective when they conceptualise, implement and communicate their contributions to the provision of public goods and service. For example, a resource developer may be expected to deliver on high expectations for local procurement and local employment. But if the country's education, skills development and labour market systems do not produce the human capital required to meet these expectations within commercially feasible boundaries, there are limits set as to how much a resource developer can meet these expectation by providing human capacity building services on its own.¹¹⁷

Second, addressing the underplayed role of the state is more difficult. There is often still a strong perception that the role of the state has to be viewed inherently with suspicion because of the risk of state failure. Of course, this risk exists, but a more thorough reading of institutional analyses suggests that the same applies to the risk of market failure. Both types of failure can have common causes, so identifying and averting these is what really matters. This brings the discussion right back to the issues discussed in relation to Debate No 3 in Chapter 2 on comparative institutional advantages and the functions that institutions provide, as well as Chapter 5, which has alerted to fortunate shifts in political coalitions underpinning positive institutional changes that result in such advantages.

The implication of this weakness is to reconsider how institutional analyses focusing on processes can be deployed to support the developmental contributions of the extractive resources sector can make. The type of institutional analyses required is not the compilation of cross-country comparative macro-level indicators measuring good sector institutions and good sector governance. Instead, it is analyses that look from bottom-up, laying out and helping to address specific challenges in a country's existing institutional

¹¹⁷ New research suggests that in countries with so-called 'limited statehood' there is a case for corporate entities to provide public goods and services on behalf of the state, because of the latter's limited administrative reach. Interestingly, this research has found that the processes underpinning the legitimisation of such an alternative mode of public goods and service provision might be critical for success (Krasner and Risse 2014).

arrangements in relation to the extractive resources sectors. For example, an institutional mapping of the education, skills development and the labour market systems and who shapes these systems how, conducted against the background of comparative knowledge of such systems, could potentially identify practical steps towards helping a producer country seize local employment opportunities. It could show how the relevant sector ministries, resource developers and their supply chain, and delivery-oriented third parties might want to collaborate to jointly achieve this objective.

This implication resonates with those who have more generally reviewed the contributions that institutional analyses have made to the development debate. For example, Oppen (2008) maintains that institutions provide a useful concept for conducting micro-level analyses. However, she cautions that a better understanding of how transformational change across the several levels of institutions comes remains hampered by insufficient collaborative research efforts involving the various sub-disciplines of the social sciences. Interestingly, proponents who have studied institutional change in OECD countries reach a similar conclusion on the usefulness of micro-level analyses. Streeck (2009) proposes that working from the micro-level upwards stands the best chance of bringing about positive systemic changes at the meso-level, which in turn may ultimately underpin positive changes in macro-level outcomes. He concludes that institutional analyses should be used more as a contextually grounded heuristic, rather than strive for a grand theory explaining variance in outcomes in order to draw generic policy conclusions from these. This is also the premise put forth by proponents of the *Institutional Analysis and Development Framework* (IAD), which Chapter 8 will explain further as an example of a conceptual framework that supports institutional analyses focused on processes.

An example that can illustrate the argument for micro-level analyses is the discussion

presented in Chapter 4 on resource property rights. It highlighted the flaws of the liberal institutional reform approach for viewing sector legal frameworks as an input variable that could be changed top-down by technical design. The alternative is to tackle deficient sector legal frameworks from bottom-up through a process of incremental change, where a mapping of existing institutional arrangements can help to identify where the crunch points lie that undermine the legitimacy and enforceability of rights to extractive resources. Most likely such crunch points are found at the intersection between level 1 and level 2 institutions.¹¹⁸

This chapter has summarised the critical analysis of the global debate on the ‘good governance’ of the extractive resources sectors by first, repeating the three high-level questions that the thesis set out to answer. Second, it has summarised the substance of the thesis presented in Chapter 2 to 6. On this basis, it then moved on then to answering the thesis’ three high-level questions, where the first question looked back, the second related to the present, and the third question looked forward. The fourth subsection has drawn out some of the implications of the answers to the forward-looking third question. The next chapter provides a brief discussion of the type of heuristic approach to institutional analyses that might serve practically minded policy analysts going forward.

¹¹⁸ Arguably, in practice resource developers are taking this approach when, for example, they assess the rights of indigenous peoples and the duties for resource developers that arise from these. However, to date the anthropological and legal perspectives have dominated in assessments. The author of this thesis argues that it could be beneficial if such assessments were conducted against the background of a conceptual framework that incorporates a broader, and more systematic social science perspective.

8. Implications for practice

Policy analysts with a practical interest in contributing to improving the economic, political and social outcomes that producer countries achieve on the back of developing extractive resources will be inclined to raise the question how they could apply the types of institutional analyses upon which this thesis has drawn for its critical analysis. The thesis has argued that in the broader social sciences there are approaches to institutional analyses that have looked more deeply at the diversity and heterogeneity of institutions and the role they play in relation to problems of collective action. At the same time, these approaches recognise the complexity of, and the challenges posed by, institutional analyses.

One such approach is the *Institutional Analysis and Development Framework* (IAD), developed by Elinor Ostrom and her collaborators (Ostrom 2005) against the background of decades of empirical and theoretical work primarily on community-based collective action and the governance of common-pool natural resources.¹¹⁹ These proponents embarked from observing that the outcomes of real-life social dilemma situations have often not corresponded with the outcomes that theories and models predicated for such situations. They also noted that the diversity of institutional solutions found addressing such situations has correlated strongly with the diversity of situations observed. These observations led them to critique the dominant liberal perspective that focused on institutional forms as a critical input for achieving positive outcomes (see discussion in sub-section 4.3.2).

¹¹⁹ The thesis has cross-referenced this work in the context of addressing the question ‘*how do institutions change*’ (chapter 4), specifically in the discussion on theories of institutional change (section 4.2), where such change is considered the outcome of contingent processes that run across several levels of institutions. Further cross-references are contained in section 1.4 on the purpose of a conceptual framework, and in sub-section 3.1.4 respective the observation that existing theories and models have not recognised the role of level 1 type institutions associated with ‘*social embeddedness*’ in shaping people’s cognition and subsequently their actions.

Acknowledging the real-life diversity and heterogeneity of institutional arrangements, these observers have subsequently focused their attention on the developing a framework that would provide a systematic method for mapping and analysing real-life policy dilemmas without denying the existence of complex overlapping and multi-levelled institutional arrangements and polycentric governance systems. They have developed the IAD framework to draw out the relationship between individuals' actions, collective action and macro-level economic, political and social outcomes, mediated by the institutional arrangements that diverse actors have created, and keep changing, in various cultural and historical circumstances. The framework focuses on individuals' interests, incentives and actions, while at the same time providing a tool to map the institutional configurations of various social systems and their inner workings and describing the multi-level processes that may take place across these. The crux is to gain a better understanding of social dilemmas by systematically considering the structure of the situation that relevant actors are facing so that the policy analyst can select appropriate assumptions about actors' interests, incentives and likely behaviour. The premise is that institutional mapping can guide heuristic cognitive processes that may serve policy analysts to identify viable strategies for nudging institutional change in a certain direction. For example, institutional mapping may support strategic decision-making around crafting a reform coalition supporting desirable institutional change.¹²⁰

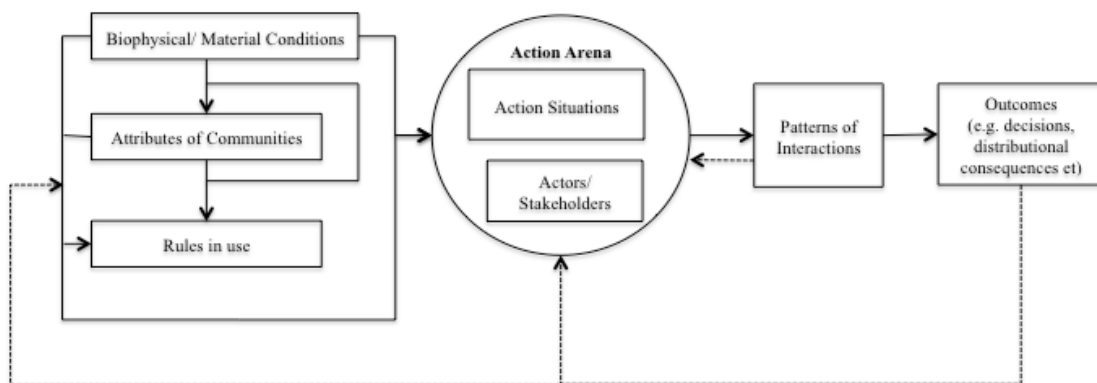
Figure 14 depicts the basic schematic representation of the IAD framework. At its core lies the concept of an *action arena*, comprising an *action situation* and *actors*. The action arena is the central focus for examining, mapping and predicting interactions. Additional core elements are a set of factors that have been identified to determine the action situations where actors interact, including (i) the rules in use that organise the

¹²⁰ A contrary approach is that underlying Cust and Harding (2013), who suggest that the commercial investment decisions of actors - in this case resource developers - can be derived from measuring the performance of certain types of institutions.

relationships between individuals, (ii) biophysical and material conditions, and (iii) the nature of the communities to which individual actors relate. The premise is that actors choose among diverse potential actions against the background of these structural characteristics of the specific action arena. The proposed institutional mapping tries to capture the characteristics of the action arena to infer about the action situation and the actors' preferences, information-processing capabilities, selection criteria and resources as well as the processes that unfold when these interact and individual and collective decisions are taken.

In essence, the IAD framework provides a heuristic device to produce institutional maps to orientate social action. Its meta-theory is to guide analysts to, first, take a look at the relevant actors, existing institutional arrangements and histories that constitute an action situation, and only then to turn to any other sets of variables, factors, or features that the social phenomena of interest implies (Aligica 2014, p. 83).

Figure 14: The IAD framework – conceptualizing an action arena

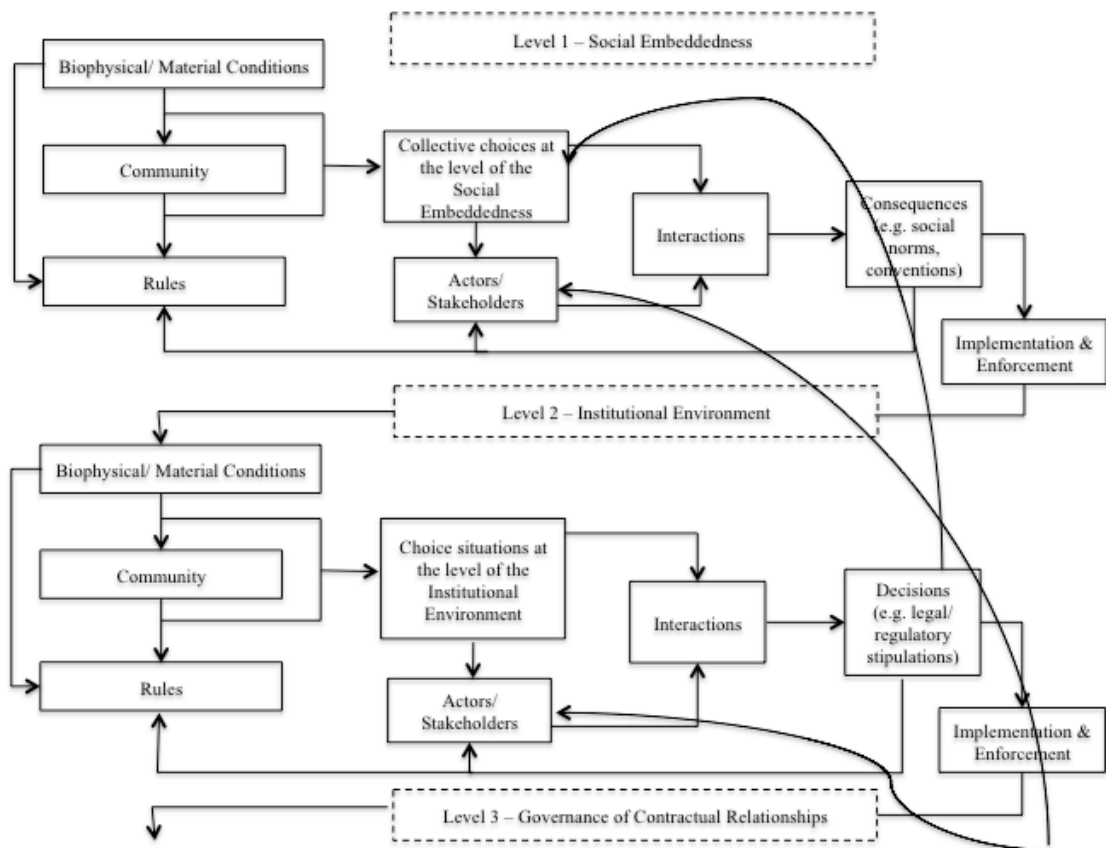


Source: author's reproduction, based on Aligica (2014, p. 88) and Ostrom (2005, p. 15).

The mapping process entails three steps. The first is to identify and map an action arena, i.e. the action situation and the actors. The second step is to identify the factors that condition that action arena, i.e. the rules in use, the relevant biophysical and material conditions, and the nature of the communities that are related to the action arena. The

third step is to project how the preceding two steps may generate patterns of interactions and specific outcomes over multiple action arenas. Thus, the framework encourages connecting various levels of analysis. Depicting just two levels, this is schematically sketched out in Figure 15. The nomenclature for the various levels used by Ostrom and her collaborators has been replaced with that which the thesis set out based on Williamson (2000). A third and fourth level can be imagined to follow the same pattern.

Figure 15: Connecting levels through the lens of the IAD framework



Source: author's adaptation, based on Aligica (2014, p. 91)

Figure 15 indicates that the connections between the levels can capture 'level-shifting strategies' that actors active in one action arena may want to deploy, if they feel that their interests or concerns are not well represented in that particular action arena.

A core issue of interest for Ostrom and her collaborators has been the resilience of different governance systems in light of exogenous shocks induced by natural

phenomena. They have observed that the resilience of a system has something to do with its institutional diversity, while at the same time the resilience of an institution has to do with its position and role in the overall systemic institutional ecology (Aligica 2014, p. 103). Compared to other types of resilience studies connecting the natural with human systems, Ostrom and her collaborators have put greater emphasis on the socio-institutional aspects of human systems, because they see human systems as social constructs that incorporate human learning and diversity. Resilience, and therefore also the sustainability of a governance system, demands innovation and the adaptation of its institutional arrangements, where actors design and re-design the rules in use.¹²¹ Thus, it is the concern about resilience that has led these proponents to focus their conceptual framework at the meta-level and the socio-political processes of rule design. Similar to Williamson pointing to the connections between the different levels of institutions, Ostrom and her collaborators have observed that more resilient systems work across different levels, where lower-level operational institutions identify and signal problems upwards, and higher-level social and constitutional institutions create the conditions for society to adapt to new challenges.

Exceeding the remits of this thesis, more could be said about the IAD framework and its applications. Its validity and usefulness is obviously determined by the objectives and the intentions of the analyst that applies it. There are alternative heuristic frameworks that can guide institutional analyses to focus on the processes that create and change institutions. One of these is *Agency-Centered Institutionalism (ACI)*, first developed by Fritz Scharpf and Renate Mayntz in the late 1990s. This approach emerged in response to the types of institutional analyses that have underpinned Debate No 2 on the political economy of the extractive resources as an endeavour to move beyond the typical

¹²¹ Ostrom's views on resilience pose an interesting question in light of the finding of Collier and Venables (2010) that natural resources have a positive effect on the quality of governance above a certain threshold level: it may be the case that that threshold level is associated with institutional diversity and heterogeneity, and thus the ability of polycentric governance systems to learn and innovate.

dichotomy of agency versus structural explanations, such as *rent-seeking* versus *rentier states*. The core premise of ACI is to recognize that, when policies are developed, institutional factors should be considered separately from the dynamics of actors' interactions. The argument is that although institutional factors condition policy outputs by influencing actors' perceptions of reality and structuring the way they interact, ultimately it is actors not institutions that decide on policies. This premise cautions that institutions do not determine actors, but that additional factors related to actors warrant attention in their own right. Notably, ACI inspired the types of systematic comparative analyses that the thesis associated with Chapter 2's Debate No 3 on the linking the resources sector with other economic sectors and the discussion in Chapter 3 on methodological choices.¹²²

The final question to ask is how a heuristic framework guiding institutional analyses, such as the IAD framework, can serve different constituencies with a practical stake in the governance of the extractive resources sectors to contribute to processes by which institutional arrangements are re-designed.

Resource developers could use such a framework to identify and assess socio-political and political-economic risks that may be associated with particular producer countries or the development of a particular extractive resources project. From which level such an application should embark, would depend on its underlying intention. For example, a corporate analyst could use such a framework to scope the emphasis and appropriate level of detail of an ESIA to define the level of institutional details on communities and rules in use such an assessment should collect in order to inform propositions about potential patterns of interactions and their implications for the design of impact mitigation and management measures.

¹²² The respective references include Hall and Soskice (2001), Thelen (1999) and Streeck (2009), as well as others conducting OECD focused research on 'Varieties of Capitalism' that was cross-referenced in Chapter 2 (sub-section 2.3.2.2), Chapter 3 (sub-section 3.2.3) and Chapter 4 (sub-section 4.1.3).

Based on the personal experience of the author, existing ESIA methodologies are not well developed in capturing how institutions at different levels affect both, the impacts of extractive resources projects and the potential reactions of impacted constituencies. For example, this weakness is not rectified by another heuristic framework that has been proposed to inform such assessments, namely the *Sustainable Livelihoods Approach* (SLA) (Coakes and Sadler 2011). The focus of the SLA has been on local communities and their reliance to externally induced change. It has been built on the recognition that, in order to sustain their livelihoods, poor people draw on a complex range of activities and assets, the latter of which they often do not own (Norton and Foster 2001). This can make them particularly sensitive to changes to the natural resources upon which their livelihoods depend. Amongst the development community, the SLA gained currency in the 1990s in response to the specific objective formulated at the time to focus aid on poverty reduction. In the context of the insights gained from this thesis, the usefulness of the SLA for informing social impact assessments is limited by its unspecified and undifferentiated understanding of ‘structures’ and ‘processes’. It appears incognizant of the relevant debate in the broader social sciences, including that of Ostrom and her collaborators focusing intensely on the governance of natural resources and the institutional resilience of social constituencies.

Those working on behalf of producer countries and their governments, or other national constituencies, could apply the IAD framework to explore how a country’s existing institutional arrangements could be adapted to respond better to an emerging extractive resources sector, for example by encouraging linkages to be built between this and other potentially viable economic sectors. To achieve this may require institutional innovations where strategic political entrepreneurs would need to build coalitions of interests, based on shared information and other strategic policy interventions targeted at encouraging positive collective decisions.

For third parties who have a vested interest in supporting the governance of the extractive resources sector to deliver broader benefits to the citizens of producer countries, the IAD framework could be useful to identify, and subsequently strategize, how and where they could deploy their resources to support collective decisions, including of course on re-designing rules in use, that would enable citizens to capture the opportunities associated with extractive resources projects.

This chapter has discussed a heuristic framework that policy analysts could draw upon to approach improving the governance of the extractive resources sector from a process-focused perspective that recognised the role of different actors in bringing about institutional change. Perhaps, the main hurdle for shifting course from the mainstream ‘good governance’ perspective is to invest in learning about these approaches. Ostrom’s advice has been that understanding institutions and how they come about is not easy, but it is far too important a subject to treat it with simply dichotomisations of ‘good’ versus ‘bad’, or ‘markets’ versus ‘states’. Her years of experience studying real-life cases of natural resource governance dilemmas have taught her that learning to use a set of conceptual maps and determining the right amount of detail to use is a skill that takes some time to acquire (Ostrom 2005, p.8). The next chapter concludes the thesis.

9. Conclusion

This doctoral thesis embarked from the observation that, over the past decade, the global agenda on the ‘good governance’ of the extractive resources sectors has seen a remarkable elevation. At the same time, it noted that in the broader social sciences the governance concept, and how it has been used to inform institutional reforms, has been subject to critique. The thesis noted an apparent disconnect between the expectations associated with the approach of the global agenda to put pressure on producer countries to improve their sector institutions, and other sector-relevant empirical developments taking place at the global, national and local project levels.

To understand how the sector-focused good governance agenda compares against the critique from the broader sciences and empirical developments, the thesis developed a conceptual framework that has identified the different uses of the governance concept in the broader social sciences. It set out a matrix that captured whether users have focused on *rules, results, processes*, and/or the *ability to steer*. This framework then guided the thesis in, first, reviewing the three main scholarly debates on the opportunities and challenges faced by countries producing extractive resources, and second, answering a set of questions that this review prompted in relation to institutional analyses and their application to the global agenda on the good governance of the extractive resources sectors.

The thesis was deliberately pitched at the level of making a conceptual contribution, because it set out the hypothesis (see page 30), that much of the existing work on resource governance has been slanted towards a particular type of theoretical approach that has prompted the global agenda and its associated action agenda to develop in one particular direction. The thesis conjectured that, if this were indeed the case, the scholarly debate would benefit from this thesis providing new insights that could potentially guide

further research and bear relevance for practically-minded policy analysts sharing an interest in improving the developmental outcomes of countries producing extractive resources. Specifically, the thesis started with the proposition that researchers should undertake more systematic comparative analyses and develop new theory rather than conduct yet more cross-country statistical analyses to test existing theoretical propositions.

The introductory chapter set out three high-level questions to guide the thesis through the complexity of several strands of social science research in order to prove the thesis' hypothesis. The substance to answering these three questions was delivered by Chapters 2 to 6. The literature provided in Chapter 2 prompted four questions in relation to institutional analyses, which Chapters 3 to 6 dealt with in turn. Finally, Chapter 7 answered the three high-level questions and drew out the implications.

In summary, Chapter 7 answered the three high-level questions as follows:

The first question looked back and asked: *how have policy conclusions on extractive resources governance come about and how have these influenced the global agenda?* The thesis has shown that the global agenda on the 'good governance' of the extractive resources sectors has been built on the widely endorsed conclusion that 'good institutions' make for better outcomes and, therefore, producer countries need to improve their sector institutions. The thesis has argued that this conclusion has been brought about by (a) a methodological preference that has supported theory testing and (b) an ontological stance that has defined institutions in a way that has lent itself to drawing policy conclusions on what needs to be done. However, knowing that 'good institutions' matter is not the same as knowing how they are brought about.

The second question focused on the present. It asked: *how do proponents of the global agenda associate extractive resources sector governance with the complexity of, and the*

challenges posed by, institutional analyses? The thesis has answered this question in the following way: the seemingly obvious conclusion, that producer countries need to improve their sector institutions, has ignored the complexity and confusion around ‘governance’ and ‘institutions’ that prevails in the broader social science literature. The proponents of the global agenda have shown little regard for this complexity and the challenges posed by, institutional analyses.

The third question had looked forward and asked two sub-questions: *what are the strengths and weaknesses of the existing scholarship, and what do these imply?* The thesis has provided two separate answers: one on the strengths, the other on the weaknesses. The first answer has been that the strength of the existing scholarship lies in the broadened debate on the political economy of the extractive resources sectors. More recently, this includes the rediscovery of industrial policy as a means to build cross-sector linkages. The strength of this broadened debate, in turn, is that it has shown where research could be further advanced. In particular, there are several areas where theory development could shed new light on important unanswered questions.

The second answer has been that a main weakness of the existing scholarship on the governance of the extractive resources sectors lies in its lack of attention to the processes on the basis of which institutions are established and changed and how they are enforced. This weakness arises because proponents have uncritically supported the dichotomisation of ‘good’ versus ‘bad’ governance and ‘good’ versus ‘bad’ institutions. This has supported the conclusion that good ‘institutions’ can provide a solution. However, the broader social science literature on institutional change strongly suggests that institutions are better viewed as the outcome of processes and that they should be looked at across the various levels of social analyses that have defined them in different ways. For the role of policy advisers and international development agencies, a stronger focus on processes

implies that they would have to broaden the basis of their advice and interventions, such as moving away from the more narrow focus on sector transparency towards building better linkages between the extractive resources and other economic sectors. Building better linkages is bound to require more collaboration and collective action and a less adversarial stance vis-à-vis the (often presumed) intentions and objectives of both decision-makers in producer countries and resource developers.

A further weakness has been that the global agenda has underplayed the role of the state, particularly with respect to supporting positive collective action. The global agenda has implied that the politicians and bureaucrats of producer countries are the source of ‘bad’ institutions. At the same time, it has assumed that these very same agents will, at some point and somehow, provide ‘better institutions’ and therefore bring about good resource sector government. The role of the state is underplayed because ultimately states remain responsible for defining and enforcing rights to extractive resources and balancing these rights against the costs that come with the exploitation of these types of resources. The role of the state could be re-balanced if collective action could be deployed to improve the overall developmental contributions that the extractive resources sectors can make. The conjecture is to conduct institutional analyses that focus on processes and map countries’ specific existing institutional arrangements in relation to the extractive resources sectors in order to identify potential challenges that could be overcome with positive collective action. For example, such an approach could be taken in relation to the policy issues flagged by Debate No 3 on building better linkages between the extractive resources and other economic sectors.

Finally, a third weakness arises from comparing the approach that corporate practitioners have developed on identifying and managing local-level project impacts, with the strengths and weaknesses of the existing scholarship that has typically looked at the

country-level. This showed that corporate practitioners have also tended to underplay the role of the state, while at the same time they have tended to overplay the role of resource developers. The conjecture is that it could serve corporate practitioners to acknowledge the insights gained by structural-institutional and systematic comparative analyses to expand their recognition of the complexities and challenges that arise at the critical intersections between the different levels of institutions identified by Williamson's hierarchy. Chapter 8 provided a brief discussion of the type of heuristic approach to institutional analyses that might serve practically minded policy analysts going forward.

In summary, the thesis has confirmed its hypothesis that much of the existing work on resource sector governance has been slanted towards a particular type of theoretical approach that has prompted the global agenda, and its corresponding action agenda, to develop in one particular direction. The policy conclusions of the global debate are premised on the dominance of a particular reference point paired with a particular methodology. This has led to an emphasis on, first, identifying the types of institutions that have apparently led to desired results; and, second, to the promotion of these as a means to steer towards these results. Its focus on institutions as a solution has premised the global agenda on a false sense of clarity on what producer countries ought to be improving. Put in the wider context of global developments affecting the energy and mineral markets - such as geopolitical shifts in supply and demand, technological developments, and the social and political transformations taking place in at least some producer countries - the global agenda on good sector governance overpromises on what it can deliver.

Bibliography

Acemoglu, Daron. 2003. 'Why not a political Coase theorem? Social conflict, commitment and politics'. *Journal of Comparative Economics*, Vol. 31, No. 5, pp. 620-652.

Acemoglu, Daron and Simon Johnson. 2005. 'Unbundling institutions'. *Journal of Political Economy*, Vol. 113, No. 5, pp. 949-95.

Acemoglu, Daron and James Robinson. 2012. *Why Nations Fail: The Origins of Power, Prosperity and Poverty*. New York: Crown.

Acemoglu, Daron, Simon Johnson and James A. Robinson. 2003. 'An African success story: Botswana'. In Dani Rodrik (ed.), *In Search of Prosperity: Analytical Narratives on Economic Growth*. Princeton: Princeton University Press.

———. 2001. 'The colonial origins of comparative development: An empirical investigation'. *American Economic Review*, Vol. 91, No. 5, pp. 1369-401.

Adésínà, Jimí O. 2012. 'Social Policy in a Mineral-Rich Economy: The case of Nigeria'. In Hujo, Katja (ed). *Mineral rents and the financing of social policy. Opportunities and challenges*. Basingstoke: Palgrave Macmillian.

Ahrens, Joachim. 2002. *Governance and Economic Development: A Comparative Institutional Approach*. Cheltenham: Edward Elgar.

———. 2000. 'Toward a Post-Washington Consensus: The Importance of Governance Structures in Less Developed Countries and Economies in Transition'. *Journal of Institutional Innovation, Development and Transition*. Vol. 4. Pp. 78-96.

———. 1998. 'Economic development, the state, and the importance of governance in East Asia'. *Economic Systems*, Vol. 22, No. 1, pp. 23-51.

Alber, Jens. 1982. *Vom Armenhaus zum Wohlfahrtsstaat: Analysen zur Entwicklung der Sozialversicherung in Westeuropa*. Frankfurt/Main: Campus.

Aligica, Paul Dragos. 2014. *Institutional Diversity and Political Economy. The Ostroms and Beyond*. Oxford: Oxford University Press.

Allen, Matthew M. 2013. 'Comparative capitalism and the institutional embeddedness of innovative capabilities.' *Socio-Economic Review*, Vol. 11, pp. 771-794.

Alston, Lee J. 2008. 'The "Case" for Case Studies in New Institutional Economics'. In Brousseau, Eric and Jean-Michel Glachant (eds). *New Institutional Economics. A Guidebook*. Cambridge: Cambridge University Press.

Alston, Lee J, Thráinn Eggertsson and Douglass C. North (eds). 1996. *Empirical Studies in Institutional Change*. Cambridge University Press.

Andrews, Matt. 2013. *The Limits of Institutional Reform in Development. Changing Rules for Realistic Solutions*. Cambridge University Press.

———. 2008. *Are One-Best-Way Models of Effective Government Suitable for*

Developing Countries? (or) Do We Need a Theory of Government Before We Measure Government Effectiveness? Prepared for the Oxford Policy Institute, Oxford. Mimeo.

Arezki, Rabah and Frederick Van der Ploeg. 2008. *Can the Natural Resource Curse be Turned into a Blessing? The Role of Trade Policy and Institutions*. OxCarre Research Paper No. 2008–01, Oxford Centre for the Analysis of Resource Rich Economies, Oxford.

Arndt, C. and C. Oman. 2006. *Uses and Abuses of Governance Indicators*. Paris: Development Centre Studies, Organisation for Economic Cooperation and Development (OECD).

Ascher, William. 2012. 'Mineral Wealth, Development and Social Policy in Indonesia'. In Hujo, Katja (ed). *Mineral rents and the financing of social policy. Opportunities and challenges*. Basingstoke: Palgrave Macmillian.

Atkinson, Giles and Kirk Hamilton. 2003. 'Savings, growth and the resource curse hypothesis'. *World Development*, Vol. 31, No. 11, pp. 1793–807.

Auty, Richard M. (ed.). 2001a. *Resource Abundance and Economic Development*. UNU –Wider Studies in Development Economics. Oxford: Oxford University Press.

———. 2001b. 'The political economy of resource-driven growth'. *European Economic Review*. Vol. 45, pp. 839-846.

Auty, Richard M. and Alan H. Geld. 2001. 'The Political Economy of Resource-Abundant States' In Auty, Richard M. (ed.). *Resource Abundance and Economic Development*. UNU –Wider Studies in Development Economics. Oxford: Oxford University Press.

Auty, Richard M. and Philippe Le Billion. 2007. '*Managing Revenues from Natural Resources and Aid*'. In Oli Brown, Mark Halle, Sonia Penha Moreno and Sebastian Winkler. *Trade, Aid and Security. An Agenda for Peace and Development*. London/Sterling VA: Earthscan.

Baldwin, R. E. 1956. 'Patterns of development in newly settled regions'. *Manchester School of Social and Economic Studies*, Vol. 24, pp. 161-179.

Bardhan, Pranab. 2001. 'Distributive conflicts, collective action, and institutional economics'. In Gerald M. Meier and Joseph E. Stiglitz (eds), *Frontiers of Development Economics: The Future in Perspective*. Oxford: Oxford University Press.

Barma, Naazneen, Kai Kaiser, Tuan Minh Le and Lorena Viñuela. 2012. *Rents to Riches. The Political Economy of Natural Resource-Led Development*. Washington D.C.: The World Bank.

Bastida, Ana Elizabeth. 2004. 'Mining Law: New Directions?' In Bastida, Ana Elizabeth, Thomas Waelde and Janeth Warden Fernandez (eds), *International and Comparative Mineral Law & Policy. Trends and Prospects*. The Hague: Kluwer Law International.

———. 2006. 'Sustainable Investment in the Minerals Sector. Re-examining the Paradigm'. *International Environmental Agreements*. Vol 6, No 4, December.

———. 2008. 'Mining Law in the Context of Development'. In Philip Andrews-Speed (ed), *International Competition for Resources: The Role of Law, State and Markets*. Dundee: Dundee University Press.

Bates, Robert H. 2008. *When Things Fell Apart: State Failure in Late 20th Century Africa*. Cambridge: Cambridge University Press.

———. 2001. *Prosperity and Violence: The Political Economy of Development*. New York: W. W. Norton & Company.

———. 1989. *Beyond the Miracle of the Market. The Political Economy of Agrarian Development in Kenya*. Cambridge University Press, Cambridge.

Bebbington, Anthony, Teresa Bornschlegl and Adrienne Johnson. 2013. 'Political Economies of the Extractive Industry: From Documenting Complexity to Informing Current Debates'. *Development and Change*. doi:10.1111/dech.12057

Beblawi, Hazem 1990. 'The Rentier State in the Arab World'. In Luciani, Giacomo *The Arab State*. London: Routledge.

Benner, Thorsten and Ricardo Soares de Oliveira, with Frederic Kalinke. 2010. 'The Good/Bad Nexus in Global Energy Governance'. In Andreas Goldthau and Jan Martin Witte (eds), *Global Energy Governance. The New Rules of the Game*. Washington/Berlin: Brookings Institution Press/Global Public Policy Institute.

Berg-Schlosser, Dirk and De Meur. 2009. 'Comparative research design. Case and Variable Selection'. In Rihoux, Benoit and Charles C. Ragin (eds). *Configurational Comparative Methods. Qualitative Comparative Analysis (QCA) and Related Techniques*. Los Angeles: Sage

Berkowitz, Daniel, Katharina Pistor and Jean-Francois Richard. 2003. 'The Transplant Effect'. *American Journal of Comparative Law*, Vol. 51 (11), pp. 163-204.

Bhattacharyya, Sambit and Roland Hodler. 2010. 'Natural resources, democracy and corruption'. *European Economic Review*. Vol. 54, pp. 608-621.

Blanco, Luisa R. Jeffrey B. Nugent, and Kelsey J. O'Connor. 2014. 'Oil curse and institutional change: Which institutions are most vulnerable to the curses and under what circumstances?' *Contemporary Economic Policy*, doi:10.1111/coep.12077.

BMWI. 2010. *The German Government's Raw Materials Strategy. Safeguarding a sustainable supply of non-energy mineral resources for Germany*. Berlin: Federal Ministry for Economics and Technology (BMWI).

BMZ. 2010. *Extractive Resources in German Development Cooperation*. BMZ Strategy Paper 4 2010e. Berlin: Federal Ministry for Economic Development and Cooperation (BMZ).

Bornhorst, Fabian, Sanjeev Gupta and John Thornton. 2008. *Natural Resource Endowments, Governance, and the Domestic Revenue Effort: Evidence from a Panel of Countries*. Working Paper No. 170, Washington, DC: IMF

Boschini, Anne, Jan Pettersson and Jesper Roine. 2012. 'Resource Curse and its Potential Reversal'. *World Development*. Vol. 43, pp. 19-41.

———. 2007. 'Resource curse or not: A question of appropriability'. *Scandinavian Journal of Economics*, Vol. 109, No. 3, pp. 593–617.

Boutilier, Robert G. and Leeora Black. 2013. 'Legitimizing industry and multi-sectoral regulation of cumulative impacts: A comparison of mining and energy development in Athabasca, Canada and the Hunter Valley, Australia'. *Resources Policy*, No. 38, pp. 696–703.

Brady, Henry E. and David Collier (eds). 2004. *Rethinking social inquiry: diverse tools, shared standards*. Lanham: Rowan & Littlefield.

Bratton, Michael and Nicolas Van de Walle. 1997. *Democratic Experiments in Africa. Regime transition in comparative perspective*. Cambridge: Cambridge University Press.

Bräutigam, Deborah, Odd-Helge Fjeldstad and Mick Moore (eds). 2008. *Taxation and State Building in Developing Countries: Capacity and Consent*. Cambridge: Cambridge University Press.

Bridge, Gavin. 2008. 'Global production networks and the extractive sector: governing resource-based development', *Journal of Economic Geography*, Vol. 8, pp. 389–419.

Brookings Africa Growth Initiative. 2013. 'Oil and Gas Management for inclusive and sustainable development: An East African Regional Forum', *Proceedings Report* January 23–24, with Economic Policy Research Centre and Kenya Institute for Public Policy Research and Analysis.

Brousseau, Eric and Jean-Michel Glachant (eds). 2008. *New Institutional Economics. A Guidebook*. Cambridge: Cambridge University Press

Brosio, Giorgio and Juan Pablo Jiménez. 2012. 'The intergovernmental allocation of revenue from natural resources: finding a balance between centripetal and centrifugal pressure'. In Brosio, Giorgio and Juan Pablo Jiménez (eds). *Decentralization and Reform in Latin America. Improving Intergovernmental Relations*. Cheltenham: Edgar Elgar

Brunnschweiler, Christa N. 2008. 'Cursing the blessing? Natural resource abundance, institutions, and economic growth'. *World Development*, Vol. 36, No. 3, pp. 399–419. doi:c10.1016/j.worlddev.2007.03.004.

Brunnschweiler, Christa N. and Erwin H. Bulte. 2008a. 'The resource curse revisited and revised: A tale of paradoxes and red herrings'. *Journal of Environmental Economics and Management*, Vol. 55, No. 3, pp. 248–64. doi: 10.1016/j.jeem.2007.08.004.

———. 2008b. 'Linking Natural Resources to Slow Growth and More Conflict'. *Science*, Vol. 320.

Bulte, Erwin H., Richard Damania and Robert T. Deacon. 2004. *Resource Abundance, Poverty and Development*. Working Papers 04-03. Agricultural and Development Economics Division of the Food and Agricultural Organization of the United Nations (FAO-EAS).

Cameron, Peter D. 2010. *International Energy Investment Law. The Pursuit of Stability*. Oxford University Press.

Campbell, Bonnie K. 2013 (ed). *Modes of Governance and Revenue Flows in African Mining*. Basingstoke: Palgrave MacMillan.

——— 2010. 'Revisiting the Reform Process of African Mining Regimes'. *Canadian Journal of Development Studies*. Vol 30, Nos 1-2, pp.197-217.

——— 2008. *Reform Processes in Africa: Issues and Trends*. Paper prepared for the 2nd International Study Group Meeting, United Nations Economic Commission for Africa (UNECA), Addis Ababa, Ethiopia, 19–21 May. Mimeo.

——— 2004. *Regulating Mining in Africa. For whose Benefits?*. Noordiska Afrikainstitutet. Discussion Paper 26.

Cangiano, Marco, Teresa Curristine, and Michel Lazare (eds). 2013. *Public Financial Management and Its Emerging Architecture*. Washington DC: International Monetary Fund.

Chang, Ha-Joon. 2007. *Institutional Change and Economic Development*. London: Anthem Press and UNU Press.

Chindo, Murtala and Michael Bradshaw. 2013. 'Communities: A case study of Oil Sands in Nigeria'. In Dannreuther, Roland and Wojciech Ostrowski (eds). *Global Resources. Conflict and Cooperation*. Basingstoke: Palgrave Macmillan.

Clausen, Jens R. 2008. 'Calculating Sustainable Non-mineral Balances as Benchmarks for Fiscal Policy: The Case of Botswana on Botswana'. *IMF Working Paper*. WP/08/117. Washington DC: International Monetary Fund.

Clay, Karen and Gavin Wright. 2003. *Order without Law? Property Rights during the Californian Gold Rush*. Working Paper No. 265, Stanford: Stanford Law School.

Coakes, Sheridan and Andreas Sadler. 2011. 'Utilizing a sustainable livelihoods approach to inform social impact assessment practice'. In: Vanclay, Frank and Ana Maria Esteves (eds). *New Directions in Social Impact Assessment. Conceptual and Methodological Advances*. Cheltenham, UK: Edward Elgars.

Coase, Roland. 1960. 'The Problem of Social Cost'. *Journal of Law and Economics*. Vol. 3, pp. 1-44.

Collier, Paul and Anke Hoeffler. 2006. *Testing the Neocon Agenda: Democracy in Resource-Rich Societies*. Department of Economics, Oxford University, October.

——— 2004. 'Greed and Grievance in Civil War'. *Oxford Economic Papers*, Vol. 54, pp. 563-95.

Collier, Paul and Benedikt Goederis. 2007. *Commodity Prices, Growth, and the Natural Resource Curse: Reconciling a Conundrum*. Department of Economics, University of Oxford (preliminary draft).

Collier, Paul and Anthony J. Venables. 2010. 'Natural Resources and State Fragility'. *EUI Working Paper*, RSCAS 2010/36. Robert Schuman Centre for Advanced Studies, European University Institute, Florence.

——— 2011. *Plundered Nations? Successes and Failures in Natural Resource*

Extraction. Basingstoke: Palgrave MacMillan.

Congleton, Roger D., Arye L. Hillman and Kai . Konrad. 2008. 'Forty Years of Research on Rent Seeking: An Overview.' In Roger D. Congleton, Arye L. Hillman and Kai Konrad (eds). *Forty Years of Research on Rent Seeking 1*. Berlin: Springer.

Corden, Max W. and J. Peter Neary. 1982. 'Booming Sector and De-Industrialisation in a Small Open Economy'. *The Economic Journal*. Vol. 92, pp. 825-848. December.

Cotula, Lorenzo. 2008. 'Reconciling regulatory stability and evolution of environmental standards in investment contracts: towards a rethinking of stabilization clauses'. *World Energy Law and Business*. Vol. 1, Issue 2, pp. 158-179.

Crabtree, John. 2014. 'Funding Local Government: Use (and Abuse) of Peru's Canon System'. *Bulletin of Latin American Research*. Doi:10.1111/blar.12174.

Cramton, Peter. 2007. 'How Best to Auction Oil Rights'. In Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz (eds), *Escaping the Resource Curse*. New York: Columbia University Press.

Crowson, Phillip. 2007. 'The Resource Curse: A Modern Myth?' In Richards, Jeremy P. *Mining, Society and a Sustainable World*, Heidelberg: Springer.

Cust, James and Torfinn Harding. 2013. *Institutions and the Local of Oil Exploration*. OxCarre Research Paper, No. 127. Oxford Centre for the Analysis of Resource Rich Economies, University of Oxford.

Dabán Sánchez, Teresa and Jean-Luc Héris. 2013. 'Public Financial Management in Natural Resource-Rich Countries. In Cangiano, Marco et al (eds). *Public Financial Management and Its Emerging Architecture*. Washington, DC: IMF.

Daintith, Terence. 2010a. 'The Rule of Capture: The Least Worst Property Rule for Oil and Gas'. In McHarg, Aileen. Barry Barton. Adrian Bradbrook and Lee Godden (eds.), *Property and the Law in Energy and Natural Resources*. Oxford University Press: Oxford.

——— 2010b. *Finders Keepers? How the Law of Capture shaped the World Oil Industry*. Resources For the Future Press/Earthscan.

Daniels, Philip. 1995. 'Evaluating State Participation in Mineral Projects: Equity, Infrastructure and Taxation'. In James Otto. *The Taxation of Mineral Enterprises*. London: Kluwer Law International.

Dannreuther, Roland and Wojciech Ostrowski (eds). 2013. *Global Resources. Conflict and Cooperation*. Basingstoke: Palgrave Macmillan.

Davis, Graham. 2009. 'Extractive Economies, Growth, and the Poor'. In Richards, Jeremy P. *Mining, Society and a Sustainable World*, Heidelberg: Springer.

Davis, Graham A. and Arturo L. Vásquez Cordano. 2013. 'International Trade in Mining Products'. *Journal of Economic Surveys*. doi:10.1111/j.1467-6419.2011.00695.x

——— 2012. 'The fate of the poor in growing mineral and energy economies'. *Resources*

Policy, Vol. 38, Issue 2, pp. 138-151.

Davis, Graham A. and John E. Tilton. 2005. 'The resource curse'. *Natural Resources Forum*. Vol. 29, pp. 233-242.

Davis, Jeffrey M., Ronaldo Ossowski and Annalisa Fedelino (eds). 2003. *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*. Washington, DC: International Monetary Fund.

Davis, Rachel and Daniel M. Franks. 2011. 'The costs of conflict with local community in the extractive industry'. *First International Seminar on Social Responsibility in Mining*. 19-21 October 2011. Santiago: Chile.

DEFRA. 2012. *A Review of National Resource Strategies and Research*. London: Department for Environment, Food and Rural Affairs.

Demsetz, Harold. 1967. 'Toward a Theory of Property Rights'. *American Economic Review*. Vol 57, No 3, pp. 347-359.

De Oliveira, Adilson. 2012. 'Brazil's Petrobras: strategy and performance'. In David G Victor, David R. Hulst, and Mark Thurber (eds.), *Oil and Governance. State-owned Enterprises and the World Energy Economy*. Cambridge: Cambridge University Press.

De Soto, Hernando. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. London: Black Swan Books.

De Soysa, Indra and Eric Neumayer. 2007. 'Resource Wealth and the Risk of Civil War Onset: Results from a New Data Set of Natural Resources Rents, 1970-1999'. *Conflict Management and Peace Studies*. Vol. 24, No. 3, pp. 201-218.

DiBoscio, Nicolas, Mark Slade and Jordan Ward. 2013. *Digging Deeper for Development*. (unpublished manuscript).

Dietsche, Evelyn, Samantha Dodd, Dan Haglund, Mark Henstridge, Maja Jakobsen, Esmeralda Sindou and Caroline Slaven. 2013. 'Topic Guide: Extractive industries, development and the role of donors'. EPS PEAKS/DFID. Oxford: Oxford Policy Management.

Dietsche, Evelyn. 2013. 'Sector Legal Frameworks and Resource Property Rights'. In Dannreuther, Roland and Wojciech Ostrowski (eds). *Global Resources. Conflict and Cooperation*. Basingstoke: Palgrave Macmillan.

——— 2012. 'Institutional Change and State Capacity in Mineral-Rich Countries'. In Hujo, Katja (ed.). *Mineral rents and the financing of social policy*. Basingstoke: Palgrave Macmillan.

——— 2007. Why the quality of institutions is not a cure for the 'Resource Curse'. *The Journal of Energy and Development*. Vol XXXII. No. 2, pp. 262-282.

———. 2003. *The Political Economy of Policy Decisions: Why good technical reform designs don't always work, A Literature Review*. Oxford: Oxford Policy Institute.

Dietz, Simon, Eric Neumayer and Indira de Soya. 2007. 'Corruption, the resource curse, and genuine savings'. *Environment and Development Economics*, Vol. 12, pp. 33-53.

- DiJohn, Jonathan. 2009. *From Windfall to Curse? Oil and Industrialization in Venezuela, 1920 to the Present*. University Park, PA: Penn State University Press.
- . 2007. 'The political economy of taxation and tax reform in developing countries'. In Ha-Joon Chang (ed.), *Institutional Change and Economic Development*. London: Anthem Press and UNU Press.
- . 2005. 'Economic Liberalization, Political Instability, and State Capacity in Venezuela'. *International Political Science Review*. Vol 26, No. 1, pp. 107-124.
- . 2002. *Mineral-Resource Abundance and Violent Political Conflict: A Critical Assessment of the Rentier State Model*. Crisis State Programme Working Paper No. 20, London School of Economics, London.
- DiJohn, Jonathan and James Putzel. 2000. *State Capacity Building, Taxation and Resource Mobilization in Historical Perspective*. Paper presented at the Development Studies Institute (DESTIN) Conference, New Institutional Theory, Institutional Reform and Poverty Reduction, London School of Economics and Political Science, 7–8 September.
- Drimmer, Jonathan. 2010. 'Human rights and the extractive industries: Litigation and compliance trends'. *Journal of World Energy Law and Business*. Vol 3, No 2.
- Dunning, Thad. 2008. *Crude Democracy. Natural Resource Wealth and Political Regimes*. Cambridge: Cambridge University Press.
- Easterly, William. 2002. *The Elusive Quest for Growth. Economists' Adventures and Misadventures in the Tropics*. Cambridge MA and London: The MIT Press.
- Easterly, William, Jozef Ritzen and Michael Woolcock. 2006. 'Social cohesion, institutions, and growth'. *Economics & Politics*, Vol. 18, July, pp. 103–20.
- Ebrahim-Zadeh, Christine. 2003. 'Back to Basics: Dutch Disease: Too much wealth managed unwisely' *Finance and Development*, Vol. 40, No. 1.
- Eichengreen, Barry. 2007. *The European Economy Since 1945: Coordinated Capitalism and Beyond*. Princeton: Princeton University Press.
- Eggertsson, Thráinn. 1990. *Economic behaviour and institutions*. Cambridge Surveys of Economic Literature. Cambridge University Press, Cambridge.
- . 2005. *Imperfect Institutions. Possibilities and Limits of Reform*. Ann Arbor: University of Michigan Press.
- Eifert, Benn, Alan Gelb and Nils Borje Tallroth. 2003. 'The Political Economy of Fiscal Policy and Economic Management in Oil-Exporting Countries', In Davis, Jeffrey M., Ronaldo Ossowski and Annalisa Fedelino (eds). *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*. Washington, DC: International Monetary Fund.
- Erten, Bilge and José Antonio Ocampo. 2012. 'Super-cycles of commodity prices since the mid-nineteenth century'. *DESA Working Paper*. No. 110. ST/ESA/2012/DWP/110. February.

Esping-Andersen, Gøsta. 1999. *The Social Foundations of Post-industrial Economies*. Oxford: Oxford University Press.

European Commission. 2013. 'On the implementation of the Raw Materials Initiative'. *Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*. 24.06.2013. COM (2013) 442 final.

Evans, Peter B. 2007. 'Extending the "institutional" turn: Property, politics, and development trajectories'. In Ha-Joon Chang (ed.). *Institutional Change and Economic Development*. London: Anthem Press and UNU Press.

Evans, Peter, Dietrich Rueschemeyer and Theda Skocpol (eds.). 1985. *Bringing the State Back in*. Cambridge: Cambridge University Press.

Farooki, Masuma and Raphael Kaplinsky. 2012. *The Impact of China on Global Commodity Prices: The Global Reshaping of the Resource Sector*. Abingdon and New York: Routledge.

Findlay, Ronald and Mats Lundahl. 2001. 'Natural Resources and Economic Development: The 1870-1914 Experience', In Auty, Richard (ed.). *Resource Abundance and Economic Development*. UNU-Wider Studies in Development Economics. Oxford: Oxford University Press.

Firmin-Sellers, Kathryn. 1996. *The Transformation of Property Rights in the Gold Coast: An Empirical Analysis Applying Rational Choice Theory*. Cambridge: Cambridge University Press.

———. 1995. 'The Politics of Property Rights'. *The American Political Science Review*, Vol. 89, No. 4, pp. 867-881.

Fritz, Verena, Kai Kaiser and Brian Levy. 2009. *Problem-Driven Governance and Political Economic Analysis*. Washington DC: The World Bank.

Fukuyama, Francis. 2013. 'What is Governance'. Commentary. *Governance: An International Journal of Policy, Administration, and Institutions*.
Doi:10.1111/gove12035.

Gajigo, Ousman, Emelly Mutambatsere and Guirane Ndiaye. 2012. *Gold Mining in Africa. Maximizing Economic Returns for Countries*. Working Paper Series, No. 147, March, Tunis: African Development Bank Group.

Gelb, Alan and Associates. 1988. *Oil Windfalls. Blessing or Curse?* New York: Oxford University Press.

George, Alexander L. and Andrew Bennett. 2004. *Case Studies and Theory Development in the Social Sciences*. Cambridge: Belfer Center for Science and International Affairs, JFK School of Government, Harvard University.

GIZ. 2011. *On the use of results chains in natural resources governance. Basic concepts and exemplary application to the extractive industries*. Frankfurt am Main: Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) and Federal Ministry for Economic Cooperation and Development (BMZ).

Goederis, Benedikt and Samuel W. Malone. 2011. 'Natural Resource Booms and Inequality: Theory and Evidence'. *The Scandinavian Journal of Economics*. Vol 113, 2, pp. 388-417.

Granovetter, Mark. 1985. 'Economic Action and Social Structure: The Problem of Embeddedness'. *American Journal of Sociology*. Vol. 91, No. 3, pp. 481-510.

Granovetter, Mark and Richard Swedberg (eds). 2011. *The Sociology of Economic Life*. Third Edition. Boulder, Colorado: Westview Press.

Greif, Avner. 2006. *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*. Cambridge: Cambridge University Press.

Guajardo Beltrán, Juan Carlos. 2012. 'Mineral Rents and Social Development in Chile'. In Hujo, Katja (ed). *Mineral rents and the financing of social policy. Opportunities and challenges*. Basingstoke: Palgrave Macmillian.

Haber, Stephen and Victor Menaldo. 2011. 'Do natural resources fuel authoritarianism? A reappraisal of the resource curse'. *American Political Science Review*, Vol. 105, No. 1, p. 1-26.

Haber, Stephen, Armando Razo and Noel Maurer. 2003. *The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico, 1876–1929*. Cambridge: Cambridge University Press.

Haggard, Stephen. 2004. 'Institutions and Growth in East Asia'. *Studies in Comparative International Development*. Vol. 38, No.4, pp. 53-81.

Haggard, Stephen, Andrew MacIntyre and Lydia Tiede. 2008. 'The Rule of Law and Economic Development'. *Annual Review of Political Science*. Vol 11, pp. 205-234.

Haglund, Dan. 2011. *Blessing or curse? The rise of mineral dependence among low- and middle-income countries*. Oxford UK: Oxford Policy Management.

Hall, Paul A. and R. C. R. Taylor. 1996. 'Political science and the three new institutionalisms'. *Political Studies*, Vol. 31, pp. 1–23.

Hall, Peter A. 2003. 'Aligning ontology and methodology in comparative politics'. In J. Mahoney and D. Rueschemeyer (eds), *Comparative Historical Research in the Social Sciences*. Cambridge: Cambridge University Press.

Hall, Peter A. and David Soskice. 2001. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.

Hardin, Garrett. 1968. 'The tragedy of the commons'. *Science*, Vol. 162, pp. 1243-1248.

Harvey, Bruce. 2011. 'Foreword: SIA from a resource developer's perspective'. In Vanclay, Frank and Ana Maria Esteves (eds). *New Directions in Social Impact Assessment. Conceptual and Methodological Advances*. Edgar Elgar, Cheltenham and Northampton, MA.

Hausmann, Ricardo and Roberto Rigobon. 2003. 'An Alternative Interpretation of the 'Resource Curse': Theory and Policy Implications (January 2013). *NBER Working Paper No. w9424*.

Herbst, Jeffrey. 2000. *States and Power in Africa: Comparative Lessons in Authority and Control*. Princeton: Princeton University Press.

Heum, Per. 2008. 'Local Content Development. Experiences from oil and gas activities in Norway'. *SNF Working Paper* No. 02/08.

Hirschman, Albert. 1977. 'A generalized linkage approach to development, with special reference to staples', In Nash, Manning (ed.). *Essays on Economic Development in Honor of Bert F. Hoselitz*. Chicago IL: Chicago University Press.

Hodges, Tony. 2004. *Angola: Anatomy of an Oil State*. Bloomington & Indianapolis: Indiana University Press.

Hodler, Roland. 2004. 'The Curse of Natural Resources in Fractionalized Countries'. *Diskussionsschriften* 04-04. Universitaet Bern, Volkswirtschaftliches Institute.

Hönke, Jana and Christian R. Thauer. 2014. 'Multinational Corporations and Service Provision in Sub-Saharan Africa: Legitimacy and Institutionalization Matter'. *Governance: An International Journal of Policy, Administration, and Institutions*. doi:10.1111/gove.12072.

Hoff, Karla and Joseph E. Stiglitz. 2005. 'The creation of the rule of law and the legitimacy of property rights: the political and economic consequences of a corrupt privatization'. *NBER Working Paper Series*, No. 11772. Cambridge MA.

Hujo, Katja (ed.). 2012. *Mineral rents and the financing of social policy. Opportunities and challenges*. Basingstoke: Palgrave Macmillan.

Humphreys, David. 2013. 'Minerals: Industry History and Fault Lines of Conflict'. In Dannreuther, Roland and Wojciech Ostrowski (eds). *Global Resources. Conflict and Cooperation*. Basingstoke: Palgrave Macmillan.

———. 2010. 'The great metals boom'. A retrospective'. *Resources Policy*. Vol 35, pp. 1-13.

Humphreys, Macartan. 2005. 'Natural Resources, Conflict and Conflict Resolution: Uncovering the Mechanisms'. *Journal of Conflict Resolution*. Vol 49, 4, pp. 508-37.

Humphreys, Macartan, Jeffrey D. Sachs and Joseph E. Stiglitz (eds). 2007. *Escaping the Resource Curse*. New York: Columbia University Press.

Humphreys, Macartan and Martin E. Sandbu. 2007. 'The political economy of natural resource funds'. In Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz (eds), *Escaping the Resource Curse*. New York: Columbia University Press.

Hyden, Goran, Julius Court, and Kenneth Mease. 2004. *Making Sense of Governance Empirical Evidence from 16 Developing Countries*. Boulder/London: Lynne Rienner Publishers.

IBRD/World Bank. 1996. 'A Mining Strategy for Latin American and the Caribbean'. *World Bank Technical Paper*. No. 345. Washington DC: The World Bank.

ICMM. 2013a. *The mining sector in Brazil: building institutions for sustainable development*. London: International Council on Mining and Metals.

- . 2013b. *Responsible Mining in Peru*. London: International Council on Mining and Metals.
- . 2009. *Minerals Taxation Regimes. A review of issues and challenges in their design and application*. London: International Council for Mining and Metals and Commonwealth Secretariat.
- . 2007a. *Chile Country Case Study*. London: International Council on Mining and Metals, Geneva: UNCTAD, Washington, DC: World Bank.
- . 2007b. *Ghana Country Case Study*. London: International Council on Mining and Metals, Geneva: UNCTAD, Washington, DC: World Bank.
- . 2007c. *Peru Country Case Study*. London: International Council on Mining and Metals, Geneva: UNCTAD, Washington, DC: World Bank.
- . 2006. *Synthesis of Four Country Case Studies. The Challenge of Mineral Wealth: Using Resource Endowments to Foster Sustainable Development*. London: International Council on Mining and Metals.
- IDS. 2010. *Review of Impact and Effectiveness of Transparency and Accountability Initiatives: Synthesis Report*. Institute of Development Studies, available on: <http://www.ids.ac.uk/files/dmfile/IETASynthesisReportMcGeeGaventaFinal28Oct2010.pdf>
- Innes, Harold. 1920. *The Fur Trade in Canada*. New Haven: CT: Yale University Press.
- Iimi, Atsushi. 2006. 'Did Botswana escape from the Resource Curse?' *IMF Working Paper*. WP/06/138.
- IIED/WBCSB. 2002. *Breaking New Ground: Mining, Minerals and Sustainable Development*. London and Sterling, VA: Earthscan.
- Imbs, Jean and Romain Wacziarg. 2003. 'Stages of Economic Diversification'. *American Economic Review*, Vol. 93, pp. 63-86.
- IMF. 2007a. *Guide on Resource Revenue Transparency*. Washington DC: International Monetary Fund.
- . 2007b. *The Role of Fiscal Institutions in Managing the Oil Revenue Boom*. Fiscal Affairs Department. Washington DC: International Monetary Fund.
- . 2010. 'A Public Financial Management Framework for Resource-Producing Countries'. *IMF Working Paper* 10/72.
- Immergut, Ellen. 2005. 'Historical-institutionalisms in political science and the problem of change'. In Andreas Wimmer and Reinhart Kössler (eds), *Understanding Change: Models, Methodologies, and Metaphors*. Basingstoke: Palgrave Macmillan.
- . 1997. 'The normative roots of the new institutionalism: Historical-institutionalism and comparative policy studies'. In A. Benz and W. Seibel (eds), *Theorienentwicklung in der Politikwissenschaft: Eine Zwischenbilanz*. Baden-Baden: Nomos Verlagsgesellschaft.

- Ismael, Kareem. 2010. 'The Structural Manifestation of the 'Dutch Disease': The Case of Oil Exporting Countries. *IMF Working Paper*. WP/10/103.
- Isham, Jonathan, Michael Woolcock, Lant Pritchett and Gwen Busby. 2005. 'The Varieties of Resource Experiences: How Natural Resource Export Structures Affect the Political Economy of Economic Growth'. *World Bank Economic Review*, Vol. 19, No. 2.
- Jenson, Nathan and Leonard Wantchekon. 2004. 'Resource Wealth and Political Regimes in Africa. *Comparative Political Studies*. Vol. 37, No. 7, pp. 816-841.
- Johnston, David. 2007. 'How to Evaluate the Fiscal Terms of Oil Contracts'. In Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz (eds), *Escaping the Resource Curse*. New York: Columbia University Press.
- Jones Luong, Pauline and Erika Weinthal. 2010. *Oil Is Not a Curse: Ownership Structure and Institutions in Soviet Successor States*. Cambridge: Cambridge University Press.
- 2006a. 'Rethinking the resource curse: Ownership structure, institutional capacity, and domestic constraints'. *Annual Review of Political Science*, Vol. 9, pp. 241–63. doi: 10.1146/annurev.polisci.9.062404.170436.
- 2001. 'Prelude to the resource curse: Explaining oil and gas development strategies in the soviet successor states and beyond'. *Comparative Political Studies*, Vol. 34, No. 4, pp. 367–99.
- Kahneman, Daniel. 2011. *Thinking, Fast and Slow*. London: Penguin Books.
- Karl, Terry Lynn. 2007. 'Ensuring fairness: The case for transparent fiscal social contracts'. In Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz (eds), *Escaping the Resource Curse*. New York: Columbia University Press.
- 1997. *The Paradox of Plenty: Oil Booms and Petro States*. Berkeley: University of California Press.
- Karnani, Aneel. 2010. 'The Case Against Corporate Social Responsibility'. *The Wall Street Journal*. August 23, 2010.
- Keefer, Philip and David Stasavanger. 2002. 'Checks and balances, private information, and the credibility of monetary commitments'. *International Organization*, Vol. 56, No. 4, pp. 751–74.
- Keen, David. 2005. 'Liberalization and Conflict'. *International Political Science Review*. Vol. 26, No. 1, pp. 73-89.
- Kemp, Alex. 2012. *The Official History of North Sea Oil and Gas. Volume I & II*. Abingdon and New York: Routledge.
- Kemp, Deanna and Frank Vancley. 2013. 'Human rights and impact assessments: clarifying the connections in practice'. *Impact Assessments and Project Appraisal*. Vol. 31, No. 2, pp. 86-96.
- Kemp, Deanna and John R. Owen. 2013. 'Community relations and mining: core to

business but not “core business”’. *Resources Policy*. Vol 38, pp. 523-531.

Kemp, Deanna, John R. Owen and Shashi van de Graaff. 2012. ‘Corporate social responsibility, mining and “audit culture”’. *Journal of Cleaner Production*, Vol 24, pp. 1-10.

Khan, Mushtaq. 2002. ‘State failure in developing countries and strategies of institutional reform’. In Boris Pleskovic (ed.), *Annual World Bank Conference on Development Economics, Europe 2002–2003. Towards Pro-Poor Policies. Aid, Institutions and Globalization*. Herndon, VA: World Bank.

——— 2000. ‘Rent-seeking as a process’. In Mushtaq Khan and K. S. Jomo Rents (eds), *Rent-Seeking and Economic Development. Theory and Evidence in Asia*. Cambridge: Cambridge University Press.

King, Gary, Robert O Keohane and Sidney Verba. 1994. *Designing Social Inquiry*. Princeton: Princeton University Press.

Kingston, Christopher and Gonzalo Caballero. 2008. *Comparing Theories of Institutional Change*. <http://www.amherst.edu/~cgkingston/Comparing.pdf>, accessed on 23 June 2008.

Kitzmueller, Markus and Jay Shimshack. 2012. ‘Economic Perspective on Corporate Social Responsibility’. *Journal of Economic Literature*. Vol. 50, No. 1, pp. 51-84.

Klueh, Ulrich, Gonzalo Pastor, Alonso Segura and Walter Zarate. 2007. ‘Inter-sectoral Linkages and Local Content in Extractive Industries and Beyond – the Case of São Tomé and Príncipe’. *IMF Working Paper*. WP/07/213.

Knight, Jack. 1992. *Institutions and Social Conflict*. Cambridge: Cambridge University Press.

Koelble, Thomas A. 1995. ‘The New Institutionalism in Political Science and Sociology’. Review Article. *Comparative Politics*. Vol. 27, No. 2, pp. 231-243.

Kolstad, Ivar, Arne Wiig and Aled Williams. 2009. ‘Mission improbable. ‘Does petroleum-related aid address the ‘resource curse’?’’ *Energy Policy*, Vol 37, No. 3, pp. 954-965.

Kolstad, Ivar and Arne Wiig. 2009. ‘Is Transparency the Key to Reducing Corruption in Resource-Rich Countries’. *World Development*, Vol. 37, No. 3, pp. 521-532.

Korhonen, I. 2004. *Does Democracy Cure a Resource Curse?* Discussion Paper No. 18, Bank of Finland Institute for Economies in Transition, Helsinki.

Katz, Barbara G and Joel Owen. 2009. ‘Are property rights enough? Re-evaluating the big-bang claim.’ *Economics of Transition*. Vol. 17, No. 1, pp. 75-96.

Krasner, Stephen D. and Thomas Risse. 2014. ‘External Actors, State-Building, and Service Provision in Areas of Limited Statehood: Introduction’. *Governance: An International Journal of Policy, Administration, and Institutions*. doi:10.1111/gove.12065.

Kretzschmar, Gavin L, Axel Kirchner and Liliya Sharifzyanova. 2010. ‘Resource

Nationalism – Limits to Foreign Direct Investment’. *The Energy Journal*. Vol 31, No 2.

Krueger, Anne. 1974. ‘The political economy of rent-seeking society’. *American Economic Review*. Vol. 64, No. 3, pp. 291-303.

Lachmann, Richard. 2000. *Capitalists in Spite of Themselves: Elite Conflict and Economic Transition in Early Modern Europe*. Oxford: Oxford University Press.

Lange, Matthew. 2005. ‘British Colonial State Legacies and Development Trajectories: A Statistical Analysis of Direct and Indirect Rule’. In Matthew Lange and Dieter Rueschmeyer. *States and Development: Historical Antecedents of Stagnation and Advance*. New York: Palgrave Macmillan. Political Evolution and Institutional Change.

Lange, Matthew and Dieter Rueschmeyer. 2005. *States and Development: Historical Antecedents of Stagnation and Advance*. New York: Palgrave Macmillan. Political Evolution and Institutional Change.

Lange, Glenn-Marie and Matthew Wright. 2004. ‘Sustainable development in mineral economies: the example of Botswana’. *Environment and Development Economics*. Vol. 4, pp. 485-505.

La Porta, Rafael, Forencio Lopez-de-Silanes, Andrei Shleifer and Robert Vishny. 1999. ‘The quality of government’. *Journal of Law, Economics and Organization*, Vol. 15, No. 1, pp. 222–79.

Lee, Melissa M., Gregor Walter-Drop, and John Wiesel. 2014. Taking the State (Back) Out? Statehood and the Delivery of Collective Goods’. *Governance: An International Journal of Policy, Administration, and Institutions*. doi:10.1111/gove.12069.

Lederman, Daniel and William F. Maloney. 2007. *Natural Resources: Neither Curse, Nor Destiny*. Washington, DC: The World Bank and Stanford University Press.

Leite, C. and J. Weidman. 2002. ‘Does mother nature corrupt? Natural resources, corruption and economic growth’. In G. Abed and S. Gupta (eds), *Governance, Corruption and Economic Performance*. Washington, DC: IMF.

Levi, Margaret. 1989. *Of Rule and Revenue*. Berkley: University of California Press.

Levi-Faur, David. 2006. ‘A Question of Size? A Heuristics for Stepwise Comparative Research Design’. Rihoux, Benoit and Heike Grimm (eds). *Innovative Comparative Methods for Policy Analysis. Beyond the Quantitative-Qualitative Divide*. New York: Springer.

Libecap, Gary. 1996. ‘Economic variables and the development of the law: The case of western mineral rights’. In Lee J. Alston, Thráinn Eggertsson and Douglass North (eds), *Empirical Studies in Institutional Change*. Cambridge: Cambridge University Press.

—— 1978. ‘Economic Variables and the Development of Law: The Case of Western Mineral Rights’. *Journal of Economic History*. Vol 38, No 2, pp. 99-458.

Lin, Justin Yifu. 2012. *The Quest for Prosperity. How developing economies can take off*. Princeton: Princeton University Press.

Lipschutz, Kari and Mark Henstridge. 2013. *Mapping international efforts to strengthen*

extractive governance. Oxford: Oxford Policy Management.

Maconachie, Roy. 2008. *Diamond mining, governance initiatives and post-conflict development in Sierra Leone*. BWPI Working Paper 50. The University of Manchester Brooks World Poverty Institute.

Mahoney, James and Dietrich Rueschemeyer. 2003. *Comparative Historical Research in the Social Sciences*. Cambridge: Cambridge University Press.

Maniruzzaman, A F Munir. 2008. 'The pursuit of stability in international energy investment contracts: A critical appraisal of the emerging trends'. *Journal of World Energy Law & Business*. Vol. 1, No. 2, pp. 121-157.

Marcel, Valerie, with John V. Mitchell. 2006. *Oil Titans. National Oil Companies in the Middle East*. London & Washington DC: Royal Institute of International Affairs/Chatham House & Brookings Institution.

McHarg, Barry Barton, Adrian Bradbrook and Lee Godden (eds). 2010. *Property and the Law in Energy and Natural Resources*. Oxford: Oxford University Press.

McKinsey & Company. 2013a. *Resource Revolution: Tracking global commodity markets. Trend survey 2013*. McKinsey Global Institute and McKinsey Sustainability & Resource Productivity Practice.

McKinsey & Company. 2013b. *Reversing the curse: Maximizing the potential of resource-driven economies*. McKinsey Global Institute, McKinsey Global Energy & Materials Practice, and McKinsey Sustainability & Resource Productivity Practice.

McPherson, Charles. 2009. 'State participation in the natural resources sectors. Evolution, issues and outlook'. In Philip Daniel, Michael Keen and Charles McPherson (eds.), *The Taxation of Petroleum and Minerals: Principles, Problems and Practice*. London and New York: Routledge/ IMF.

Mehlum, Halvor, Karl Moene and Ragnar Torvik. 2006a. 'Institutions and the resource curse'. *The Economic Journal*, Vol. 116, No. 1, January, pp. 1–20.

——— 2006b. 'Cursed by resources or institutions?' *The World Economy*, Vol. 29, No. 8, August, pp. 1117–38. doi: 10.1111/j.1467-9701.2006.00808.

Mitchell, John, with Valerie Marcel and Beth Mitchell. 2012. *What Next for the Oil and Gas Industry?* London: Royal Institute of International Affairs/ Chatham House.

Mejía Acosta, Andrés. 2010. *Annex 4: Natural resource governance. A review of impact and effectiveness of transparency and accountability initiatives*. London: Transparency and Accountability Initiative, available at: <http://www.transparency-initiative.org/reports/annex-4-natural-resource-governance-review-of-impact-and-effectiveness-of-transparency-accountability-initiatives>.

Mkandawire, Thandika. 2012. 'Institutional Monocropping and Monotasking in Africa'. In Noman, Akbar, Kwesi Botchwey, Howard Stein and Joseph E. Stiglitz (eds). *Good Growth and Governance in Africa. Rethinking Development Strategies*. Oxford: Oxford University Press.

——— 2001. 'Thinking about developmental states in Africa'. *Cambridge Journal of*

Economics, Vol. 25, No. 3, pp. 289–314.

Moffat, Kieren and Airong Zhang. 2014. 'The paths to social licence to operate: An integrative model explaining community acceptance of mining'. *Resources Policy*. Vol. 39, pp. 61-70.

Morris, Mike, Raphael Kaplinksy and David Kaplan. 2012. *One Thing Leads to Another. Promoting Industrialisation by Making the Most of the Commodity Boom in Sub-Saharan Africa*. University of Cape Town.

Moore, Barrington Jr. 1967. *Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World*. Boston: Beacon Press.

Moore, Mick. 2004. 'Revenues, state formation, and the quality of governance in developing countries'. *International Political Science Review*, Vol. 25, No. 3, pp. 297–319.

Nathan, Laurie. 2005. '*The Frightful Inadequacy of Most of the Statistics*': *A Critique of Collier and Hoeffler on Causes of Civil War*. LSE Crisis States Development Research Centre. Discussion Paper No. 11.

Neary, Peter (ed.). 1986. *Natural Resource and the Macroeconomy*. Cambridge: MIT Press.

Neumayer, Eric. 2004. 'Does the "Resource Curse" hold for Growth in Genuine Income as Well?' *World Development*, Vol. 32, No. 10, pp. 1627-1640.

Nicita, Antonio and Ugo Pagano. 2008. 'Law and Economics in Retrospect'. In Brosseau and Glachant (eds.), *New Institutional Economics. A Guidebook*. Cambridge: Cambridge University Press.

Noman, Akbar, Kwesi Botchwey, Howard Stein and Joseph E. Stiglitz (eds). 2012. *Good Growth and Governance in Africa. Rethinking Development Strategies*. Oxford: Oxford University Press.

Noreng, Øystein. 2004. Norway: 'Economic Diversification and The Petroleum Industry'. *Middle East Economic Survey*. Vol. XLVII, No. 45.

North, Douglass C. 2006. *Understanding the Process of Economic Change*. Princeton: Princeton University Press.

———. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

North, Douglass C. Terry L. Anderson and Peter J. Hill. 1966 (1973, 1983). *Growth and welfare in the American past: A new economic history*. Third Edition. Englewood Cliffs, NJ: Prentice Hall.

North, Douglass C. and Robert P. Thomas. 1973. *The Rise of the Western World*. Cambridge: Cambridge University Press.

North, Douglass C., John Joseph Wallis and Barry R. Weingast. 2009. *Violence and Social Order: A Conceptual Framework for Interpreting Recorded Human History*. New York: Cambridge University Press.

Norton, Andy and Mike Foster. 2001. *The potential use of Sustainable Livelihoods Approaches in Poverty Reduction Strategy Papers*. London: Overseas Development Institute. Centre for Aid and Public Expenditure

OECD. 2013. *Policy dialogue on natural resources-based development*.

DEV/GB(2013)6. Scoping Paper for Conference held on 18/19. December 2013. Paris: Organisation for Economic Cooperation and Development.

Olson, Mancur. 2000. *Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships*. New York: Basic Books.

———. 1965. *The Logic of Collective Action*. Cambridge, Ma: Harvard University Press.

Omorogbe, Yinka and Peter Oniemoal. 2010. 'Property Rights in Oil and Gas under Domanial Regimes'. In McHarg, Aileen. Barry Barton. Adrian Bradbrook and Lee Godden (eds.), *Property and the Law in Energy and Natural Resources*. Oxford University Press, Oxford.

Onorato, William T. 1995. *Legislative Frameworks Used to Foster Petroleum Development*. Policy Research Working Paper No. 1420, World Bank, Washington, DC.

Opper, Sonja. 2008. 'New Institutional Economics and Its Application on Transition and Developing Economies'. In Brousseau, Eric and Jean-Michel Glachant (eds). *New Institutional Economics. A Guidebook*. Cambridge: Cambridge University Press.

Orihuela, Jose Carlos. 2013. "How do "Mineral-States" Learn? Path-Dependence, Networks, and Policy Change in the Development of Economic Institutions. *World Development*. Vol. 43, No. 1, pp. 138-148.

Ostrom Elinor. 2007. 'Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework'. In Sabatier, Paul A (ed.). *Theories of the Policy Process*. 2nd edition. Cambridge MA: Westwood Press.

———. 2005. *Understanding Institutional Diversity*. Princeton and Oxford: Princeton University Press.

Ostrom, Elinor, Thomas Dietz, Nives Dolšak, Paul C. Stern and Susan Stovich (eds.). 2003. *The Drama of the Commons*. Washington DC: National Academy Press.

Ostrowski, Wojciech. 2013. 'The Political Economy of Global Resources'. In Dannreuther, Roland and Wojciech Ostrowski (eds). *Global Resources. Conflict and Cooperation*. Basingstoke: Palgrave Macmillan.

Otto, James and John Cordes. 2002. *The Regulation of Mineral Enterprises: A Global Perspective on Economics, Law and Policy*. Westminster, CO: Rocky Mountain Mineral Law Foundation.

Owen, John R. and Deanna Kemp. 2013. 'Social licence and mining: a critical perspective.' *Resources Policy*. Vol. 38, pp. 29-35.

Oxford Policy Management. 2013a. *Bringing the Natural Resource Charter to life: Lessons from Nigeria*. Oxford Policy Management Briefing Note. August.

Oxford Policy Management. 2013b. *Mining in Zambia*. ICMMPD Toolkit application. Unpublished draft report, dated 13 December 2013.

Pagano, Ugo. 2007. 'Cultural globalisation, institutional diversity and the unequal accumulation of intellectual capital'. *Cambridge Journal of Economics*, Vol. 31, No. 5, pp. 649–67.

Papirakis, Elissaios and Reyer Gerlagh. 2004. 'The resource curse hypothesis and its transmission channels'. *Journal of Comparative Economics*, Vol. 31, No. 1, pp. 181–93.

Perälä, Maiju. 2003. *Persistence of Underdevelopment: Does the Type of Natural Resource Endowment Matter?* Discussion Paper No. 2003/37. Helsinki: United Nations University WIDER.

Pegg, Scott. 2012. 'Has Botswana beaten the Resource Curse?'. In Hujo, Katja (ed). *Mineral rents and the financing of social policy. Opportunities and challenges*. Basingstoke: Palgrave Macmillan.

Pierre, Jon (ed.). 2000. *Debating Governance. Authority, Steering and Democracy*. Oxford: Oxford University Press.

Pistor, Katharina. 2002. 'The Standardization of Law and its Effect on Developing Countries'. *American Journal of Comparative Law*, Vol. 97, pp. 97–130.

Polanyi, Karl. 1977 (1944). *The Great Transformation. Politische und ökonomische Ursprünge von Gesellschaften und Wirtschaftssystemen*. Frankfurt: Suhrkamp Taschenbuch Wissenschaft.

Prno, Jason. 2013. 'An analysis of factors leading to the establishment of a social licence to operate in the mining industry'. *Resources Policy*, Vol. 38, pp. 577–590.

Prno, Jason and D. Scott Slocombe. 2012. 'Exploring the origins of 'social licence to operate' in the mining sector: Perspectives from governance and sustainability theories. *Resources Policy*, Vol. 37, pp. 346–357.

Quijada, Alejandro. 2007. *Institutional quality and growth dynamics in resource-rich countries*, Centre d'Etudes et de Recherches sur le Développement International (CERDI), Université d'Auvergne.

Qureshi, Mahvash Saeed. 2008. *Africa's Oil Abundance and External Competitiveness: Do Institutions Matter?* Working Paper No. 172, IMF, Washington, DC.

Ragin, Charles. 2006. 'The Limits of net-effects thinking'. Rihoux, Benoit and Heike Grimm (eds). *Innovative Comparative Methods for Policy Analysis. Beyond the Quantitative-Qualitative Divide*. New York: Springer.

Rees, Caroline, Deanna Kemp and Rachel Davis. 2012. 'Conflict Management and Corporate Culture in the Extractive Industries: A Study in Peru.' *Corporate Social Responsibility Report No. 50*. Cambridge, MA: John F. Kennedy School of Government, Harvard University.

Ricketts, Martin. 2014. 'The contribution and intellectual legacy of Ronald Coase (1910–2013)'. *Economic Affairs*. Vol. 34, No 1, pp. 46–58.

- Rihoux, Benoit and Heike Grimm (eds). 2006. *Innovative Comparative Methods for Policy Analysis. Beyond the Quantitative-Qualitative Divide*. New York: Springer.
- Rihoux, Benoit and Charles C. Ragin (eds). 2009. *Configurational Comparative Methods. Qualitative Comparative Analysis (QCA) and Related Techniques*. Los Angeles: Sage.
- Robinson, James A., Ragnar Torvik and Thierry Verdier. 2006. 'Political foundations of the resource curse'. *Journal of Development Economics*, Vol. 79, pp. 447–68.
- Rodrik, Dani. 2007. *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton: Princeton University Press.
- Rodrik, Dani, Arvind Subramanian and Francesco Trebbi. 2004. 'Institutions rule: The primacy of institutions over geography and integration in economic development'. *Journal of Economic Growth*, Vol. 9, No. 2, pp. 131–65.
- Romer, Paul M. 1994. 'The Origins of Endogenous Growth'. *The Journal of Economic Perspectives*. Vol. 8, No. 1, pp. 3-22.
- Routley, Laura. 2014. 'Development States in Africa? A Review of On-going Debates and Buzzwords'. *Development Policy Review*. Vol. 32, No. 2, pp. 159-177.
- Ross, Michael L. 2012. *The Oil Curse. How Petroleum Wealth Shapes the Development of Nations*. Princeton and Oxford: Princeton University Press.
- . 2007. 'How mineral-rich states can reduce inequality'. In Humphreys, Macartan, J.D. Sachs and Joseph E. Stiglitz (eds). *Escaping the resource curse*. New York: Columbia University Press.
- . 2004a. 'How do Natural Resources influence Civil War: Evidence from 13 Cases'. *International Organization*. Vol. 58, No. 1, pp. 35-68.
- . 2004b. 'What do we know about natural resources and civil war?'. *Journal of Peace Research*. Vol. 41, pp. 337-56.
- . 1999. 'The political economy of the resource curse'. *World Politics*. Vol. 51, pp. 297-322.
- Rosser, Andrew. 2008. *Natural Resource Wealth, Development and Social Policy: Evidence and Issues*. Prepared for the UNRISD project on Financing Social Policy in Mineral-Rich Countries. UNRISD, Geneva: Mimeo.
- . 2006a. *The Political Economy of the Resource Curse: A Literature Survey*. Working Paper No. 268, Institute of Development Studies (IDS), University of Sussex, Brighton. April.
- . 2006b. 'Escaping the resource curse: Review essay'. *New Political Economy*, Vol. 11, No. 4, pp. 557–70.
- Sabatier, Paul A (ed.). 2007. *Theories of the Policy Process*. 2nd edition. Cambridge MA: Westwood Press.
- Sachs, Jeffrey D. 2007. 'How to Handle the Macroeconomics of Oil Wealth'. In

Humphreys et al. *Escaping the Resource Curse*. Columbia University Press.

Sachs, Jeffrey D. and Andrew M. Warner. 1995. *Natural Resource Abundance and Economic Growth*. Working Paper No. 5398, NBER, Cambridge, MA.

Sala-i-Martin, X. and A. Subramanian. 2003. *Addressing the Natural Resource Curse: An Illustration from Nigeria*. Working Paper No. 139, IMF, Washington, DC.

Sarraf, Maria and Moortaza Jiwanji. 2001. 'Beating the Resource Curse. The Case of Botswana'. *Environmental Economics Series*. Paper No. 83. Washington DC: The World Bank.

Scott, Anthony. 2008. *The Evolution of Resource Property Rights*. Oxford: Oxford University Press.

Segura, Alonso. 2006. 'Management of Oil Wealth under the Permanent Income Hypothesis: The case of Sao Tome and Principe'. *IMF Working Paper*. WP/06/183.

Sindzingre, Alice. 2007. 'Financing the developmental state: Tax and revenue issues'. *Development Policy Review*, Vol. 25, No. 5, pp. 615–32.

Skancke, Martin. 2003. 'Fiscal Policy and Petroleum Fund Management in Norway'. In Davis, Jeffrey M., Ronaldo Ossowski and Annalisa Fedelino (eds). *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*. Washington, DC: International Monetary Fund.

Smith, Norman. 2009. 'The Offshore Supplies Office: an unusual exercise in the UK industrial intervention, with a Scottish headquarters.' *The Journal of the Business Archives. Council of Scotland. Scottish Business and Industry History*, Vol. 25, Series 2. 73-97.

Snyder, Richard. 2006. 'Does lootable wealth breed disorder? A political economy of extraction framework'. *Comparative Political Studies*, Vol. 39, pp. 943–68.

Southalan, John, Kenneth Culotta and Archie Fallon. 2011. 'Indigenous People and Resource Development. A Rapidly Changing Legal Landscape'. *OGEL Journal (Oil, Gas and Energy Law Intelligence)*. Vol 4, September.

Southalan, John. 2011. 'What are the implications of human rights for minerals taxation?' *Resources Policy*. Vol 36, Issue 3, September, pp. 214-226.

Steinmo, Sven, Kathleen Thelen and Frank Longstreth. 1992. *Structuring Politics: Historical Institutionalism in Comparative Analysis*. Cambridge: Cambridge University Press.

Stevens, Paul. 2013. 'History of the International Oil Industry'. In Dannreuther, Roland and Wojciech Ostrowski (eds). *Global Resources. Conflict and Cooperation*. Basingstoke: Palgrave Macmillan.

———. 2008. 'National oil companies and international oil companies in the Middle East: Under the shadow of government and the resource nationalism cycle'. *Journal of World Energy Law and Business*, Vol. 1, No. 1, pp. 5–30.

———. 2006. "'Resource curse' and how to avoid it'. *The Journal of Energy and*

Development, Vol. 31, No. 1, pp. 1–20.

—— 2003. “Resource impact – curse or blessing. A literature survey”, IPIECA.

Stevens, Paul, Jaakko Kooroshy, Glada Lahn and Bernice Lee. 2013. *Conflict and Coexistence in the Extractive Industries*. London: Royal Institute of International Affairs/Chatham House.

Stevens, Paul and Evelyn Dietsche. 2008. ‘Resource curse: An analysis of causes, experiences and possible ways forward’. *Energy Policy*, Vol. 36, pp. 56–65.

Stiglitz, Joseph E. 2007. ‘What is the role of the state?’ In Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz (eds), *Escaping the Resource Curse*. New York: Columbia University Press.

Streeck, Wolfgang. 2009. *Re-Forming Capitalism. Institutional Change in the German Political Economy*. Oxford: Oxford University Press.

Tanzi, Vito. 2011. *Government versus Markets. The Changing Economic Role of the State*. New York: Cambridge University Press.

Thelen, Kathleen. 1999. ‘Historical institutionalism in comparative politics’. *Annual Review of Political Science*, Vol. 2, pp. 369–404.

Thurber Mark, David Hults and Patrick R. P. Heller. 2010. *The limits of institutional design in oil sector governance: exporting the ‘Norwegian model’*. Stanford University/ISA Annual Convention. Program on Energy and Sustainable Development.

Tilly, Charles. 1992. *Coercion, Capital and European States. Ad 990–1992*. Cambridge, MA, and Oxford, UK: Blackwell.

—— 1985. ‘War making and state making as organized crime’. In Peter Evans, Dietrich Rueschemeyer and Theda Skocpol (eds), *Bringing the State Back In*. Cambridge: Cambridge University Press.

Triner, Gail D. 2011. *Mining and the State in Brazilian Development*. London: Pickering and Chatto.

Tordo, Silvana. 2007. *Fiscal Systems for Hydrocarbons*. Design Issues. The World Bank: World Bank Working Paper No. 123.

Tordo, Silvana, with David Johnston and Daniel Johnston. 2010. *Petroleum Exploration and Production Rights. Allocation Strategies and Design Issues*. The World Bank: World Bank Working Paper No. 179.

Tordo, Silvana, Michael Warner, Osmel E. Manzano, and Yahya Anouti. 2013. *Local Content Policies in the Oil and Gas Sector*. Washington DC: The World Bank.

Toye, John. 2008. ‘Exploring utopia (limited) with a companion’. *Cambridge Journal of Economics*, Vol. 32, No. 3, pp. 1–13.

—— 2007. ‘Modern bureaucracy’. In Ha-Joon Chang (ed.), *Institutional Change and Economic Development*. London: Anthem Press and UNU Press.

Tsani, Stella. 2013. 'Natural resources, governance and institutional quality: the role of resources funds'. *Resources Policy*, Vol. 38, No. 2, pp. 181-195.

Umbeck, John 1977. 'The California Gold Rush. A Study of Emerging Property Rights'. *Explorations in Economic History*, Vol. 14, pp. 197-226.

——— 1981. *A Theory of Property Rights with Application to the California Gold Rush*. Iowa State University Press. Ames, IA.

UN. 2011. *Guiding Principles on Business and Human Rights. Implementing the United Nations' "Respect, Protect and Remedy" Framework*. HR/PUB/11/4. New York and Geneva: United Nations Human Rights Office of the High Commissioner.

UNCTAD. 2013. *Development and Trade Report: Adjusting to the changing dynamics of the world economy*. New York and Geneva: United Nations.

UNCTAD. 2009. *Handbook of Statistics 2009*. United Nations Conference on Trade and Development, Geneva. <http://www.unctad.org>, accessed on 5 March 2010.

——— 2007. *World Investment Report. Part II – Transnational Corporations, Extractive Industries and Development*. Geneva: United Nations Conference on Trade and Development.

UNECA. 2011. *Minerals and Africa's Development: The International Study Group Report on Africa's Mineral Regimes*. Addis Ababa: Economic Commission for Africa and African Union.

UNECA. 2012. *Governing and Harnessing Natural Resources for Africa's Development*. Programme of Work for the Eighth African Development Forum (ADF VIII). Addis Ababa. 23-25 October 2012.

UNIDO. 2012. *Promoting Industrial Diversification in Resource Intensive Economies. The Experiences of Sub-Saharan Africa and Central Asia Regions*. Vienna: UNIDO.

UNRISD. 2010. *Combating Poverty and Inequality: Structural Change, Social Policy and Politics*. Geneva: United Nations Research Institute for Social Development.

Van der Ploeg, Frederick. 2013. *Guidelines for Exploiting Natural Resources Wealth*. OxCarre Research Paper No. 128, Oxford Centre for the Analysis of Resource Rich Economies, University of Oxford.

——— 2008. *Challenges and Opportunities for Resource Rich Countries*. OxCarre Research Paper No. 2008-05, Oxford Centre for the Analysis of Resource Rich Economies, University of Oxford.

Van der Walle, Steven. 2005. *Measuring Bureaucratic Quality in Governance Indicators*. Paper for the 8th Public Management Research Conference, Los Angeles, 29 September–1 October.

Vanclay, Frank and Ana Maria Esteves. 2011. *New Directions in Social Impact Assessments. Conceptual and Methodological Advances*. Cheltenham, UK and Northampton, MA, US: Edgar Elgar.

Vernon, Raymond. 1971. *Sovereignty at Bay: The Multinational Spread of U.S.*

Enterprise. London: Longman Group Ltd.

Victor, David G, David R. Hults and Mark Thurber (eds). 2012. *Oil and Governance. State-owned Enterprises and the World Energy Supply*. Cambridge: Cambridge University Press.

Victor, David and Thomas C. Helleiner (eds). 2007. *The Political Economy of Power Sector Reform: The Experiences of Five Major Developing Countries*. Cambridge: Cambridge University Press.

Wagner, Jay and Kit Armstrong. 2010. 'Managing environmental and social risks in international oil and gas projects: Perspectives on compliance'. *Journal of World Energy Law and Business*. Vol 3, No. 2, pp. 140-165.

Watkins, Melville H. 1963. 'A staple theory of economic growth'. *Canadian Journal of Economics and Political Science*, Vol. 29, pp. 141-158.

Watson Hamilton, Jonnette and Nigel Bankes. 2010. 'Different views of the cathedral: The literature on property law theory'. In Aileen McHarg, Barry Barton, Adrian Bradbrook and Lee Godden (eds). *Property and the Law in Energy and Natural Resources*. Oxford: Oxford University Press.

Weinthal, Erika and Pauline Jones Luong. 2006. 'Combating the Resource Curse': An alternative solution to managing mineral wealth'. *Perspectives on Politics*. Vol. 4, No. 1, pp. 35-53.

Wells, Louis T. and Rafiq Ahmed. 2007. *Making Foreign Investment Safe. Property Rights and National Sovereignty*. Oxford: Oxford University Press.

Whaites, Alan. 2008. *States in Development: Understanding State-Building*. Working Paper, DFID, London.

Wiig, Arne and Ivar Kolstad. 2010. 'Multinational corporations and host country institutions: A case study of CSR activities in Angola'. *International Business Review*. No. 19, pp. 178-190.

Williamson, Oliver E. 2008. 'Foreword. The New Institutional Economics Guidebook'. In Brousseau, Eric and Jean-Michel Glachant (eds). *New Institutional Economics. A Guidebook*. Cambridge: Cambridge University Press.

———. 2000a. 'Economic institutions and development: A view from the bottom'. In M. Olson and S. Kähkönen (eds), *A Not-So-Dismal Science: A Broader View of Economics and Society*. Oxford: Oxford University Press.

———. 2000b. 'The new institutional economics: Taking stock, looking ahead'. *Journal of Economic Literature*, Vol. 38, No. 3, pp. 595–613.

———. 1985. *The Economic Institutions of Capitalism*. New York: The Free Press.

Wise, Holly and Sokol Shtylla. 2007. 'The Role of the Extractive Sector in Expanding Economic Opportunity'. *Economic Opportunity Series*. Harvard University, John F. Kennedy School of Government.

Woolcock, Michael, Lant Pritchett and Jonathan Isham. 2001. 'The Social Foundations

of Poor Economic Growth in Resource-Rich Countries'. In Auty, Richard (ed.). *Resource Abundance and Economic Development*. UNU –Wider Studies in Development Economics. Oxford: Oxford University Press.

World Bank/IFC. 2003. *Mineral Reform and the World Bank: Providing a Policy Framework for Development*. Washington DC: IFC.

Wright, Gavin and Jesse Czelusta. 2007. 'Resource-based growth: Past and present'. In Daniel Lederman and William F. Maloney (eds), *Natural Resources: Neither Curse Nor Destiny*. Washington, DC: World Bank and Stanford University Press.

Yalcintas, Altug. 2013. 'The Problem of Epistemic Cost: Why Do Economists Not Change Their Minds (About the "Coase Theorem")?' *American Journal of Economics and Sociology*. Vol 72, No. 5 (November).

Zulu, Leo and Sigismond Wilson. 2012. 'Whose Minerals, Whose Development? Rhetoric and Reality in Post-Conflict Sierra Leone.' *Development and Change*. Vol. 43, No. 3, pp. 1103-1131.